Los Angeles Region Extreme Heat Tabletop Exercise 2025: Summary Report

A collaboration of LA County Chief Sustainability Office, City of LA's Climate Emergency Mobilization Office, and the LEAP-LA Coalition

Acknowledgements

The LA County Chief Sustainability of Los Angeles, City of LA's Climate Emergency Mobilization Office, and the LEAP LA Coalition, consisting of Physicians for Social Responsibility-LA, Strategic Concepts in Organizing and Policy Education (SCOPE), Communities for a Better Environment, Esperanza Community Housing, Sacred Places Institute for Indigenous Peoples, and Pacoima Beautiful, would like to thank the follow agencies and organizations for their role in supporting the LA Extreme Heat Tabletop Exercise:

Funding & Technical Support:

- National Integrated Heat Health Information Systems (NIHHIS)
- National Weather Service (NWS)
- National Oceanic and Atmospheric Administration (NOAA) West Regional Office
- NOAA National Fire Weather Services

Participation:

- Altamed
- Asian Pacific Environmental Network (APEN)
- City of LA's Department of Recreation and Parks
- City of LA's Emergency Management Department
- City of LA's Mayors Office of Public Safety
- Communities for a Better Environment
- Community Organized Relief Effort (CORE)
- Emergency Network Los Angeles (ENLA)
- Esperanza Community Housing
- Homeless Healthcare LA
- Institute of Popular Education of Southern California (IDEPSCA)
- L.A. Care
- LA County Department of Public Health
- LA County Fire Department
- LA County Office of Emergency Management
- LADWP-Office of Emergency Management
- Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC)
- Social Action for a Just Economy (SAJE)
- Trust South LA
- UMMA Community Clinic
- USC Keck School Street Medicine Program

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Executive Summary

On June 26, 2025, leaders from across Los Angeles held the region's first-ever Extreme Heat Tabletop emergency preparedness exercise. The partners who organized the event were the County of Los Angeles Chief Sustainability Office, the City of LA's Climate Emergency Mobilization Office, and the LEAP LA Coalition made up of Physicians for Social Responsibility LA, Esperanza Community Housing, Sacred Places Institute for Indigenous Peoples, Strategic Concepts in Organizing and Policy Education, Pacoima Beautiful, and Communities for a Better Environment. The tabletop exercise simulated an extreme heat event occurring in tandem with a wildfire event that has cascading impacts for the most vulnerable populations of LA.

The exercise was funded with an award from the National Integrated Heat Health Information Systems (NIHHIS). The organizing partners convened over 40 representatives from city, county, and regional agencies, community based organizations, academic institutions, medical and direct service providers, and various other stakeholders working with heat vulnerable communities. The objectives of this exercise were the following:

- Support and include vulnerable communities in understanding and better preparing for extreme heat and fire potential over multiple days during a major Los Angeles event, and identify the existing roles, responsibilities, and resources of exercise participants that address heat and its impacts in the context of Los Angeles.
- Identify and strengthen pathways of communication and coordination across and within agencies, organizations (including utilities), and community groups related to high heat, heat risk, fire potential, and air quality to ensure effective communication to the most vulnerable stakeholders.
- Inform concurrent planning efforts of the County and City Heat Action Plan and wildfire preparedness, elaborating solutions for short-term (1 year) and longer-term (2-5+ years) heat actions and mitigation efforts, as well as clarifying roles and responsibilities of public agencies and organizations at different scales of response (individual, community, municipality, etc.).

Over the course of a day, participants undertook structured role-playing exercises to simulate their organizations' respective responsibilities and interventions in response to the compounding effects of extreme heat and wildfires. The tabletop exercise was organized into three sequential modules, based on the NOAA LA Regional Situation Manual (see Appendix A), and focused on the preparation, response, and recovery to the tabletop scenario. Each module was methodically designed to guide participants through each distinct phase of the scenario and identify gaps in communication, roles and responsibilities of each stakeholder, and areas of improvement to best ensure the safety of vulnerable communities during an extreme heat event, including but not limited to elders, youth, people with pre-existing medical conditions, communities of color, including those disproportionately burdened with additional environmental and climate hazards, workers, unhoused populations, and individuals not yet acclimated or prepared to handle an extreme heat event in LA's climate.

The discussions between community organizations, technical experts, service providers, and civil servants provided deep insights on heat relief in a tabletop format that was tailored both to the region and to participants. Above all, the relationships that came from these discussions were a critical outcome of the exercise.

Overview of Tabletop Exercise

Preparation

In 2024, the organizing partners developed an initial scope and outline for the Tabletop exercise and submitted it to the NIHHIS Heat Tabletop Exercise Planning Challenge. In January 2025, NIHHIS notified the partners that they would receive a Challenge Prize of $20,000 which could be used to organize and conduct a full exercise. The organizing partners then engaged with additional stakeholders over the course of a few months to revise and update the tabletop scenario manual based on evolving conditions in the region. The finalized exercise had a greater focus on the intersecting impacts of extreme heat and wildfire smoke, especially for communities already burdened with climate and environmental hazards.

The tabletop Situation Manual, comprising the three modules previously described, was later updated to include more refined forecast data and discussion questions that expanded on the roles and resources needed by each participant in preparing for and responding to cascading impacts from an extreme heat event.

Participants sharing introductions at the Tabletop Exercise opening discussion, including their role as it relates to extreme heat.

The development of the LA Extreme Heat Tabletop Exercise occurred parallel to the development of the LA County Heat Action Plan as well as the City of LA's Climate Emergency Mobilization Office's Heat Action and Resilience Plan. Though separate from each other, the development of these individual plans helped inform the Situation Manual, and likewise, the discussions from the Tabletop Exercise then informed each respective Heat Action Plan process.

Modules Arc

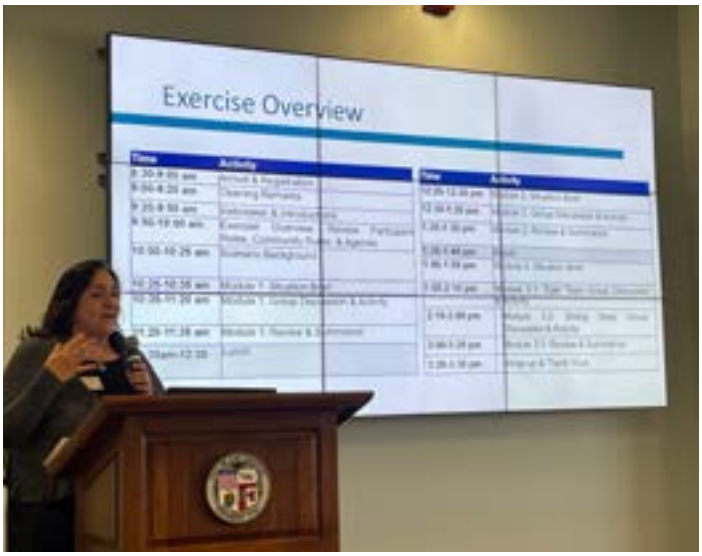
The Situation Manual is made up of a background section and 3 sequential modules that simulates the preparation, response, and recovery to an extreme heat event. The following scenario, "Gridlocked & Overloaded" reflects the collaboration and input received from different community partners and public agencies. Each module contains an introduction and context setting for that particular section, and additional subsections focused on different discussion topics. The information presented here is a brief summary of each section of the Situation Manual. For the full version of the Situation Manual please refer to Appendix A.

"Gridlocked & Overloaded" Background

The scenario started with the following 6-10 day temperature outlook for the region for the week of July 16-20, 2028:

> " Much of the LA region is projected to break temperatures over 90 degrees, especially in the inland regions, including the valleys, mountains, and deserts, as seen in Figure 1. As the week of July 16 approaches, probability of above average temperatures for the season are confirmed, and Extreme Heat Watch is issued for the LA metropolitan region. Based on the new CalHeatScore model, the CalEPA's Office of

Environmental Health Hazard Assessment (OEHHA) officially declares a heat wave in effect, and the event is named Heatwave Avery. In tandem with the arrival of the first heat wave of the season, is a Fire Weather Watch declared in the region. The intersecting impacts of both the heatwave and potential wildfire have activated many LA County and City departments in preparation for the response."



City of LA's Chief Heat Officer Marta Segura provides an overview of the tabletop agenda.

Module 1: Outlook & Preparedness

The first module focused on preparation and planning for the heatwave. Participants reviewed a 2-week advance forecast about the potential heat event, along with information on the potential physiological impacts of the first heat wave of the season on individuals not yet prepared for, or acclimatized to hotter weather. The orientation to this module highlighted existing public engagement efforts, limitations in outreach to vulnerable communities, and the acute risks to particularly vulnerable populations, including the unhoused, elders,

City of LA's Heat Action and Resilience Plan (HARP)

The City of LA's HARP is structured around 5 tracks, each of which includes strategic actions to guide the City-wide approach in prioritizing community and equity-driven investments for heat-resilient and cooling infrastructure and interventions, while reducing preventable and excessive heat injuries and deaths.

- Track A: Extreme Heat Public Awareness
- Track B: Extreme Heat Event Response and Community Resilience Services
- Track C: Heat Resilience for the Built Environment and Transportation Systems
- Track D: Cooling with Green Infrastructure and Nature-based Solutions
- Track E: Whole-City Approach to Tracking and Accountability

The gaps and solutions identified by the community through the LA Tabletop Exercise provide vital input to inform the development of the HARP's strategies and actions.

LA County Heat Action Plan (CHAP)

The CHAP is structured around 3 goals, all of which are important for protecting vulnerable communities from extreme heat

- Goal 1: Cool & Protect the Outdoor Realm
- Goal 2: Create Heat Resilient Indoor Spaces
- Goal 3: Expand Heat Safety Communications & Programs

The LA Tabletop Exercise provided a unique opportunity to inform the actions and strategies of the CHAP across goal areas, particularly for Goal 3. The Tabletop Exercise's explicit focus on roles, responsibilities, and communication channels provided deep insight on County gaps and areas of improvement for an effective response to extreme heat disasters and cascading impacts.

outdoor workers, youth, commuters, pregnant people, people with disabilities, and people with chronic health and/or pre-existing health conditions. The group reviewed the potential for dangerously poor air quality due to wildfire, especially for communities already burdened by other sources of air pollution such as industrial areas or highways. The group also discussed implications for the electrical grid including the potential for Public Safety Power Shutoffs (PSPS).

The subsections within module 1 focused on Impact assessment & Preparation, as well as Communications leading up to an extreme heat event. Participants were prompted to identify the particular impacts they would see among the particular stakeholder group, geography, or issue area they work in, and clarify what their response was based on approximately 2 weeks of lead time based on weather forecasts. The discussion also covered the roles and responsibilities of different agencies and organizations in preparing for extreme heat. Follow-up prompts explored how different entities would coordinate, which entities or agencies participants would look to for support, and how participants would convey this information to partners, stakeholders, and the general public, especially vulnerable populations.

Module 2: Communications & Immediate Response

In this section, participants talked through the hypothetical heat event:

> "Many regions across LA reach highs of 110°F, with areas like the San Fernando and San Gabriel Valley experiencing up to 120°F. The scenario escalates, as wildfires have begun in parts of the Angeles National Forest, and engulfs much of the region in dangerous levels of air quality downwind of the impact zone. As communities grapple with evacuation orders, severe transportation disruptions and power outages cause gridlocked and severe transportation delays (hence the scenario title)."

The discussion section prompts were broken up into three sections, covering Roles & Response, Communication, and Resource Mobilization. In the first section participants shared the actions their respective agency or organization would undertake in response to the extreme heat event, including key individuals, communities, or additional organizations they may engage, or collaborate with, in response to the extreme heat event. The discussion then shifted to communication strategies; however, instead of focusing on proactive engagement with the general public and vulnerable populations ahead of a heat event, this section emphasized reactive efforts, such as conveying ongoing risks and evolving conditions, and reaching out to vulnerable individuals who may lack access to phone or cellular service due to power outages. The module concluded with discussion about direct services and resources needed for vulnerable populations and how participants are able to, or limited in, connecting these communities with necessary resources during the scenario.

Module 3: Short-Term Recovery and Strategic Planning

The final module situated participants in the immediate aftermath of the cascading disasters of extreme heat and wildfires in the area and followed a distinct structure from the previous modules. The city and county tasked the group of participants with forming Tiger Team subcommittees that addressed critical issues related to the response and recovery from the most recent heat event and cascading wildfires. On the premise that the heat season is still ongoing, and school season is about to start, participants identified solutions and strategies to better prepare for ongoing impacts from heat events and wildfires during the rest of the summer season and beyond.

The module started with Participants developing a list of key issue areas in the recovery stage of these recent climate disasters. Once a list was generated, participants consolidated it into priority issue areas that formed the themes of subcommittee groups. Subcommittees offered a targeted, focused discussion space to identify key gaps, as well as areas of improvement in responding to and recovering from ongoing extreme heat events.
Each subcommittee brainstormed actions and strategies that could mitigate and respond to cascading impacts from extreme heat events and other intersecting climate issues (i.e. wildfires, air quality etc). Based on the list of draft actions and strategies each subcommittee generated, discussion questions then focused on the

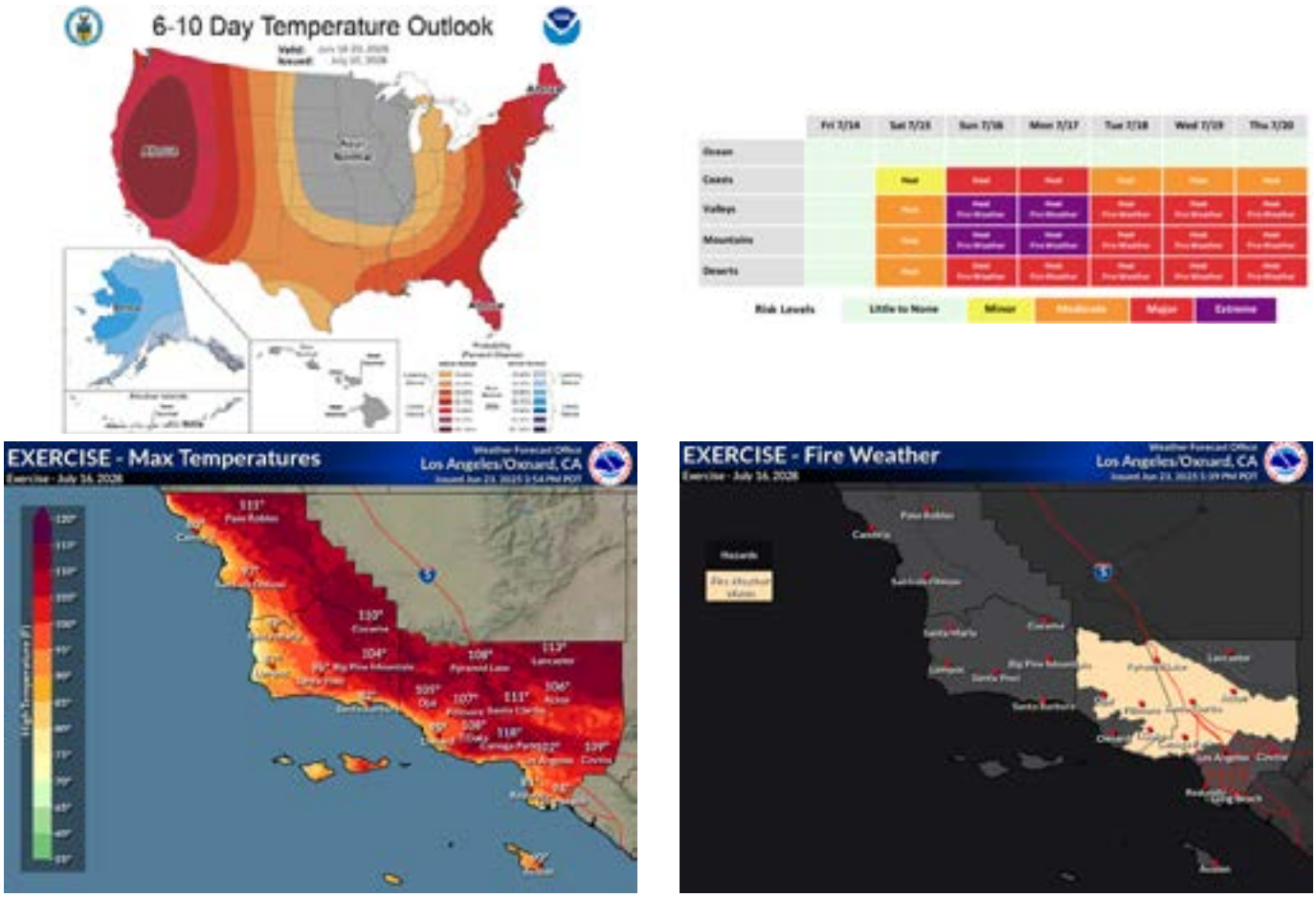
framing of these solutions, including gaps in these actions and particular needs of vulnerable populations, as well as partnership, such as how agencies, organizations, and other stakeholders can better collaborate in implementing and resourcing this list of actions and strategies.

The exercise concluded with a debrief and a summary of key points discussed throughout the scenario. Participants were asked to identify any additional information needed to support effective long-term planning. Follow-up prompts focused on prioritizing proposed actions and evaluating their implementation using metrics and other performance indicators.

Implementation

The Tabletop exercise took place on June 26, 2025, from 9 a.m.- 4 p.m. at the City of LA's Environmental Learning Center located at the Hyperion Water Reclamation Plant. There were 42 participants from various community based organizations, non-profit service providers, county and city departments, and regional representatives from the National Weather Service. For the first two modules participants were divided into 4 breakout groups with even representation across organizational affiliation. After each module participants reconvened in the plenary auditorium space to debrief and share key themes and priorities. In

Figure 1. Scenario Exercise Graphics



Forecast models mock-ups were used throughout the exercise and presentation materials. From left to right going clockwise: 6-10 day forecast model of an extreme heat wave hitting much of the US western coast; a forecast of heat and wildfire advisories for the scenario week of July 14- July 20; a localized forecast model of peak extreme heat impacts during the scenario exercise time frame; a localized model of fire weather advisories during the scenario exercise time frame
(Source: National Weather Service)

the final module participants identified key topic areas to develop subcommittees on, and self-organized the subcommittee most relevant to their issues area and stakeholder groups.

Figure 2. Individual Participation by Affiliation	
City	11
County	9
Medical	5
Non-Profit	15
Regional/State	2
Total	**42**

Group picture of all participants in attendance

Insights Shared

Module 1: Outlook & Preparedness

Impact Assessment & Preparation (Challenges)

Common issues and challenges came up across breakout group discussions. Although the scenario was framed as taking place in 2028, concerns about the current budget crises of both the city and county influenced many of the group discussions. Participants who work with vulnerable communities also described deep distrust in the government and public agencies; given recent high-profile deportation efforts, many people are fearful of entering government facilities that they perceive as potential targets for future raids. Fear deters vulnerable populations from accessing resources such as public cooling centers. Government facilities may also face limitations in availability (i.e. limited hours, occupancy limit) and accessibility (such as distance from transit). Finally, participants also conveyed that distrust in government limits the effectiveness of government messaging.

Participants further identified that medical staff and other outreach workers would need to be prepared to quickly address impacts from heat illness. Heat related illness and heat stroke can be exacerbated by, or confused with, health impacts from pre-existing health conditions, effects from prescribed medicines, substance use, or other physical and mental health issues - but many medical and outreach workers are not trained to accurately identify symptoms from heat.

Impact Assessment & Preparation (Opportunities)

Participants highlighted that trusted community leaders can serve as effective messengers. If deployed prior to a heat event, outreach workers such as staff of the Los Angeles Homeless Services Authority (LAHSA) and other direct service and medical providers can distribute information and resources to vulnerable populations. Partnership with mutual aid groups, community organizations, and trusted outreach service providers could help government and clinical staff effectively reach the most vulnerable populations. Pairing information with resource distribution could build trust in the messaging leading up to a heat wave and make vulnerable communities, such as elders, or people experiencing homelessness, more receptive to the messaging shared.

Participants noted that free transportation options such as a shuttle system could help effectively move vulnerable populations to cooling refuges, while distribution of direct resources, such as ice, water, shelter vouchers, can help mitigate any heat effects leading up to the event. Targeted outreach to outdoor workers and vulnerable worksites can raise awareness of workers rights and the necessity of more frequent breaks and access to shade during a heat wave.

Communication (Challenges)

The idea of advance notice for the heatwave created a unique challenge for participants. Many noted that 2 weeks notice was too far in advance to effectively galvanize community awareness. Due to challenges like messaging fatigue, for the general public a heat warning that far in advance may not feel immediate or urgent. Additional challenges to communicating with heat vulnerable populations include accessibility barriers such as multilingual needs, and the complex logistics of identifying and utilizing trusted communication channels for a wide range of vulnerable groups.

Social media and other digital platforms fail to reach a significant portion of the population that is vulnerable to heat. The challenges also extend to the actual content and substance being shared in any messaging prior to a heat event. Participants, especially those representing community organizations, flagged that there are limited

opportunities and resources available to address questions related to heat and health for vulnerable populations. There is a significant gap in knowledge, both in the workplace and the general public, on how to properly respond to extreme heat. Even for service providers who work directly with many of the most heat vulnerable communities, having additional training, information, and resources could help to better serve frontline communities.

Communication (Opportunities)

While a 2 week forecast may provide lead time for organizations to prepare a response, the ideal window of time for targeted messaging to vulnerable populations was discussed as being around 2-3 days before the arrival of the heat event – balancing the greater immediacy of the heatwave's approach with sufficient time for communities to respond to the heat event. One proposed strategy for coordination was the formation of a heat advisory committee. Such a committee could be responsible for fielding questions, documenting and connecting community and government response efforts, and convening networks of partners to discuss needs on the ground leading up to a heatwave.

As to the content of the material, participants emphasized visual communications over text heavy information. Information about the heat wave should be culturally relevant and ADA accessible, including easy to read fonts, large text size, and color contrast for those with color blindness or low vision. The content of messaging should include a brief list of potential actions vulnerable individuals can immediately take to keep themselves safe, such as accessing nearby cooling centers, contacting local community leaders and organizations, and connecting with additional resources in their local geography. Consolidating information, such as by integrating information on extreme heat with information on air quality and wildfires, would also go a long way in avoiding messaging fatigue.

Participants identified that the medium of communication

Meteorologist from the National Weather Service Rose Schoenfeld providing a debrief of forecast conditions for the scenario exercise

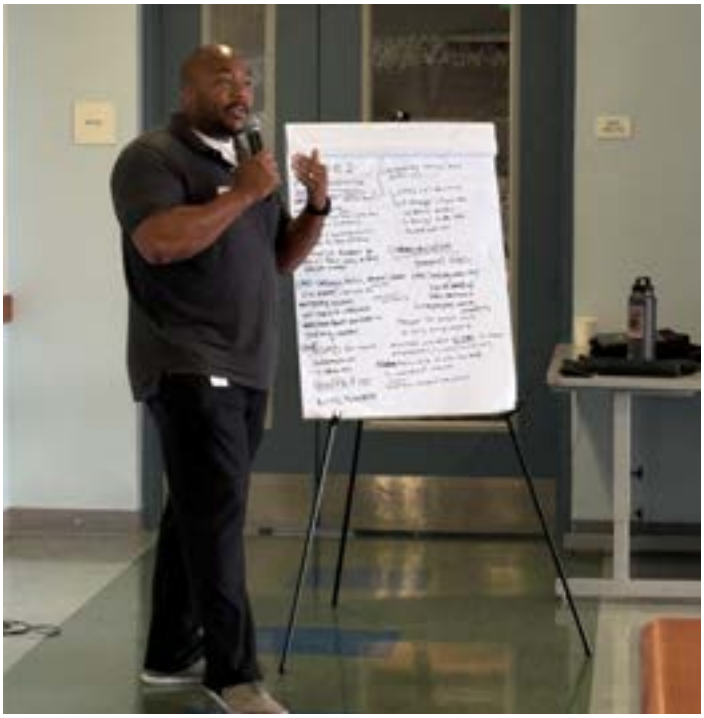
is key in effectively distributing reliable and relevant information to vulnerable groups. Communication prior to a heat event needs to expand into trusted channels, such as radio, that may be more accessible to those without a TV, computer, or smartphone. Tapping into trusted social networks, such as Los Angeles Regional Collaborative's (LARC) distribution channels and heat ambassadors, Emergency Network Los Angeles's (ENLA) partner list, Los Angeles Unified School District (LAUSD)/Parent Teacher Association's (PTA) City of Los Angeles Neighborhood Councils, Department of Public Health's (DPH) medical device providers and healthcare partners, and other trusted bodies would help maximize the reach of key messages, especially to the most vulnerable individuals. Emergency and health authorities should share relevant information with effective messengers such as service providers, mutual aid networks, promotoras and outreach workers, including street medicine teams. Word of mouth carries high impact, especially for unhoused communities, who may rely on trusted individuals and local leaders as their source of information. Pairing information with immediate resources or services, such as water, cold packs, or access to shelter, can support building trust during outreach.

Module 2: Communications & Immediate Response

Roles & Response (Challenges)

Groups like the Red Cross, Salvation Army, ENLA, and other organizations are experienced conveners able to mobilize resources at scale. During a disaster like the one simulated in the tabletop exercise, these organizations would be activated and provide services related to wildfire risks, but they do not have specific roles and resources identified to address the heat risks.

During fire emergencies, public agencies like LAFD can tap into local, state, and federal agencies to address immediate needs on the ground, such as for example the distribution of firefighters from an area that has available capacity towards another region experiencing severe wildfires. One critical challenge for these departments is how to best connect with organizations on the ground to localize resource distribution, and ensure that resources are distributed across geographies as well as particularly vulnerable populations, such as workers, elders, and people with disabilities.



Emergency Management Coordinator Nedan Omar Rambo with LA's Emergency Management Department providing a summary of Module's 2 breakout group discussions

Roles & Response (Opportunities)

Many existing networks already take action to protect the most vulnerable. Day laborer groups like IDEPSCA, for example, distribute water and masks during hot days to workers, many of whom labor in extremely hazardous climates and conditions. Community based organizations and groups already know their own neighborhoods and stakeholders; by connecting these organizations with necessary resources, heat relief can more directly reach impacted and vulnerable communities.

For heat vulnerable populations, trust can be a key factor when engaging with any resource or service. For unhoused communities for example, there may be a trusted community leader or figure who is able to help affirm the reliability of an outside organization, resource, information, or service. By working with leaders at a hyperlocal level, organizations, agencies, and service providers can foster trusted channels for effectively sharing information and resources.

Communication (Challenges)

Many community organizations already have established channels to reach members, partners, and other stakeholders. The challenge for effectively communicating during a heat wave lies in the lack of clarity of which relevant government agencies communicate with, as well as how to best connect with or access these agencies, and by extension the information and resources available to heat impacted communities.

National and local weather alerts, including those sent out via phone such as the Wireless Emergency Alerts for example, may have broad information about an extreme heat or wildfire event but may not provide customized or relevant information that speaks to conditions on the ground. In the case of wildfires for example, communities who are outside of an evacuation zone alert may have a false sense of security of being in a safe zone. Swift changes in weather conditions and

cascading disasters can turn this sense of safety into a scramble for refuge as communities suddenly fall into an evacuation designation.

Communication (Opportunities)

Effective distribution of information and communication of conditions on the ground can be best supported through tapping into hyperlocal networks. Community outreach workers, investigators, organizers, youth, and others with digital platforms can share reliable messaging on social media to alert the public and their audiences on changing conditions. Wider communication channels, such as Whatsapp, can be used to distribute media and send updates to networks of group chats and individual users. By mobilizing outreach workers, organizers and other groups, these 'Second Responders' can serve as a trusted point of contact for canvassing and door to door outreach, especially for many communities who are fearful of opening their door to strangers. Partnerships between agencies, local community groups, mutual aid networks, and other organizations can help legitimize 'Second Responders' - reinforcing their presence as safe and supportive figures during an extreme heat event. These collaborations also foster trust between the public, local government, and community groups, strengthening the social fabric at the neighborhood level.

On the side of public agencies, platforms like Everbridge can serve to quickly share information across local governments and departments. These agencies can in turn share information through email listservs to their respective clients, partners, and other stakeholders, such as Parks & Recreation and the Department of Public Health. The relationships public agencies hold with service providers and contractors can also help to further extend the distribution of information by equipping these groups with necessary resources and information to reach the vulnerable populations they serve. Several breakout group discussions pointed to the need for a formalized process in distributing information through these public channels, including the distribution of information through networks of partners and stakeholder groups, such as ENLA, SAJE, Cohort of Community Health Centers in LA County (CCALAC).

Templates for external communication can help community organizations in deploying information quickly and adapt the content to reflect conditions on the ground. Pairing that with additional material like social media posts, mailers, and other printed materials for utilities and public agencies to send out can ensure greater coverage and emphasize the scope and dangers of weather conditions. Participants from community-based organizations indicated that it would be helpful to have opportunities for dialogue with climate and emergency response authorities, such as an open conference call or webinar in the days preceding a major event.

Resource Mobilization (Challenges)

Donation and resource management at scale can pose many obstacles for organizations, agencies, and responders. Many participants shared as a recent example the difficulties in effectively distributing resources during the Altadena wildfires in January. During the wildfires there was a glut of materials, including clothes, some of which were unnecessary to recovery efforts and posed logistical issues for storage. Even though community organizations are familiar with the reality on the ground and can support mutual aid efforts, there is a lack of infrastructure to manage and effectively distribute materials. Storage for example poses a significant issue for smaller community organizations with limited space and resources. During a heat wave, items like water, ice, and perishables may require refrigeration to properly store, something many organizations do not have access to at scale.

Many vulnerable populations may not be aware of the locations and services available to them. In other instances these resources may not be physically accessible, particularly in areas that are heavily car dependent and where there is a lack of public transportation options.

Resource Mobilization (Opportunities)

Developing a decentralized system distribution can lead to more effective provision of heat relief in vulnerable areas. Service providers, outreach workers, and others who work with vulnerable populations including the unhoused, elders, and other groups, can provide immediate relief in the form of cool water, ice packs, naloxone in case of substance use, and even cold treats

for pets. Some of these resources can be informational, such as handouts, and others are non-perishable like water, but others like ice and medical supplies may require additional infrastructure to maintain and deploy effectively.

Pairing material distribution with information, including mental health resources, can increase community members' receptivity to places of refuge and resources for emergency heat relief. Larger networks, such as CCALAC, can be engaged to relay conditions and current needs on the ground so that the groups distributing information and resources can coordinate to maximize their collective reach and avoid duplication of efforts.

Tailoring resources to specific communities helps ensure relevance and impact. One suggestion, based on materials from Listo California, was the development of a graphic that could be adapted based on impacted geographic areas or zip codes. This potential visual could include 3 resources or actions an individual could take in that area to protect themselves from heat.

Module 3: Short-Term Recovery and Strategic Planning

Infrastructure & Utilities (Challenges)

Participants warned that disruptions to public transit, such as Metro service, would significantly limit mobility for transit-dependent communities during a heat emergency. Without access to cooling centers, medical facilities, or evacuation points, these populations would face greater health and safety risks. Quickly addressing the disruptions can also be challenging, given that workers may be exposed to extreme heat while making repairs.

As governments explore partnerships with private companies to support disaster response, participants stressed the need for strategy and equity in those decisions. Community members expressed concern about potential public-private partnerships with corporate entities that are not always the best community partners, and recommended strong transparency and oversight of any potential corporate partnership.

Participants also emphasized the importance of identifying persistent gaps in infrastructure, including limited transit options, overburdened utility systems, and under-resourced healthcare sites especially when many of these services may face disruptions due to extreme heat. Concerns were mentioned about power outages extending to cultural spaces such as museums and community centers that can serve as cool spots only if power is available. Other spaces like parks and open spaces were highlighted as a form of infrastructure that supports community resilience because they can help cool the community and serve as sites for gathering and connection but are not often considered in heat disaster planning.

At a household level, for those living in older housing stock, access to air conditioning may be especially difficult. The potential of high utility bills during heatwaves continues puts enormous financial pressure on low-income households, worsening existing disparities and deterring vulnerable populations from cooling themselves down early on into a heat wave.

Infrastructure & Utilities (Opportunities)

Participants saw promise in expanding services like MetroMicro to transport residents in areas affected by power shutoffs or wildfire smoke. Public agencies and community organizations could use this flexible transit system to help vulnerable individuals reach cooling centers, medical appointments, or safe shelters. To mitigate the risk of railway disruptions, such as power loss or rail warping, transit agencies could plan for expansion of bus services which have more routing flexibility.

To address widespread power shutoffs, the group recommended developing a coordinated community strategy that prioritizes households and areas dependent on electricity for survival, such as those using ventilators or other medical devices. Agencies like DPH and DWP can work with Durable Medical Equipment (DME)

providers to identify and support these residents in advance of a heat event, such as through the provision of information and resources to mitigate any potential shutoffs. Participants also called for utility debt relief programs following extreme heat events to reduce the long-term financial burden on low-income households. A potential longer-term solution is the electrification of homes, including cool, green buildings, to create new cooling opportunities for heat vulnerable areas.

Participants also urged decision-makers to adopt land stewardship practices, such as controlled burns and vegetation management rooted in Indigenous knowledge, to improve biodiversity and resilience. Biodiversity planning that incorporates native species, which are more resilient to heat, drought, and wildfires than traditional landscaping, can help ensure that communities will have access to cool outdoor spaces for the long term.

Healthcare & Services (Challenges)

Participants highlighted that data privacy restrictions limit the ability of healthcare plans, such as LA CARE, to use patient information for targeted outreach during extreme heat events. Although these organizations serve many low-income households, they often cannot identify or proactively support individuals who face elevated health risks. These privacy constraints make it challenging to develop real-time interventions for those with chronic conditions or who rely on heat-sensitive medications or medical devices.

The group also raised the need to clarify data-sharing protocols across healthcare providers and partner organizations. Without established frameworks, coordination efforts stall, especially during overlapping crises like power outages and wildfire smoke events. Agencies often struggle to understand who needs urgent help, when, and where, hindering effective response.

Healthcare & Services (Opportunities)

Participants identified multiple ways to improve healthcare preparedness for extreme heat. One approach involves equipping pharmacists and health service providers with accurate, actionable information about heat-related risks, including how high temperatures affect specific medications and conditions. This would enable providers to better advise patients, such as by encouraging greater precaution with use of diuretics, which can aggravate heat-related conditions or make a patient more susceptible to heat impacts. In other cases providers may be able to adjust treatments and prepare additional resources to best support a patient prior to, and after, an extreme heat event.

Participants suggested that healthcare-led education efforts could extend beyond just advising patients; connecting with schools, clinics, public health outreach workers, and service providers could help providers better disseminate information to the general public and heat vulnerable populations in advance of a heat event, such as in May before the peak of heat season. Increasing public awareness about heat health risks and consequences, including the effects of heat on infrastructure, social services, and quality of life, can support more effective long-term planning for heat emergencies, including the allocation of resources for sustained care and adaptation.

Mobile clinics and mobile cooling units present another opportunity to extend care directly to vulnerable populations. These mobile sites can offer hydration, administer IV fluids, provide air filtration in case of poor air quality, and deliver urgent medical care in hard-hit areas. Participants discussed the potential of deploying these services to clinics, schools, and unhoused communities -- sites where people already access care and feel safe. In addition, it would be helpful for agencies to pre-position backup generators, ventilators, and other equipment at high-risk locations to ensure continuous service during outages.

Communications & Community Partnerships (Challenges)

Community-based organizations (CBOs) face significant communication barriers during extreme heat events. Participants described how many CBOs rely on informal channels like social media to find reliable information, due to the lack of centralized platforms or consistent agency communication. This disjointed system delays

response efforts and increases the burden on frontline groups already stretched thin. Community-based organizations face limited communication capacity, yet more often than not they are the first point of contact for impacted communities due to the trust already established. Organizations and service providers are then pulled into rapid response and away from their missions or organizational scope, which can lead to severe burnout that in turn impacts longer term recovery and longevity.

Several participants noted that during past wildfires, CBOs were forced to act as de facto warehouses for supplies, even though most lack the facilities, staff, and funding to fulfill that role. Others emphasized the lack of coordination between agencies and communities across different geographies. Participants also cited several barriers to accessing cooling centers, including long distances, limited public transit, restrictive policies on pets, and low community awareness—particularly in non-English-speaking or migrant populations fearful of entering a public facility where they may be asked for documentation.

Communications & Community Partnerships (Opportunities)

Several creative solutions and strategies emerged. These included distributing free TAP cards with loaded fare or offering fare-free bus service during heatwaves to improve access to cooling centers and services. Participants suggested that agencies could expand the definition of "cooling centers" to include trusted community spaces like churches, libraries, or nonprofits, and update public databases to share details on the type of amenities a space offers, such as if it's pet-friendly or female/femme only. Especially when equipped with service providers and resources, these informal hubs can serve as vital sources of relief during heat emergencies. Public agencies can strengthen these efforts by streamlining grant support and promoting best practices in community engagement. For example, cooling centers may be better -utilized by vulnerable unhoused communities if homeless service providers were to more proactively promote them.

Participants also recommended building a formal partnership network of organizations addressing extreme heat impacts across sectors. ENLA's emerging database and LARC's contact list offer solid foundations to map service providers, build relationships, establish a regularly updated database of resources, and improve coordination. To support this network, it may help for agencies to have dedicated liaison positions that bridge communication between government departments and community groups while easing the outreach burden on CBOs. Using these centralized communication channels can also streamline calls for volunteers and better direct people power to areas of highest need. Underlying this idea was the need for a feedback loop between frontline organizations, service providers, and government agencies to accurately convey conditions on the ground and reinforce trust in broader public messaging.

Community organizations and service providers felt they could also benefit from trainings and collaborative project opportunities to address pre-existing health and environmental issues that become aggravated and amplified by climate hazards. One example raised was that of neighboring oil refineries; the pollutants that they release into the air make extreme heat more dangerous and burdensome, especially when the power goes out and communities cannot open their windows due to the noise and the smell. By building on training programs like Community Emergency Response Team (CERT), more relevant skills can be developed that address the intersectional needs of environmental justice communities during cascading impacts, such as aggravated health conditions from nearby pollutants and extreme heat.

Participants also proposed that post-event surveys, typically conducted during the development of After Action Reports for the purpose of improving preparedness for future events, be circulated to burdened communities along with immediate relief and resources. Pairing the surveys with relevant resources would facilitate the maintenance of trust between emergency responders and communities, and ensure survey participation from the communities whose experiences and perspectives are crucial to identifying necessary improvements for future emergency response.

Summary of Key Themes

The following key themes were identified across all modules, highlighting current gaps in responding to extreme heat events and potential solutions proposed by participants during the exercise. Each theme is accompanied by the number of times it was mentioned in the summary notes of each module.

Summary: Current Gaps

- **Limited Access to Information (7):** Several limitations in messaging for the wider public and specific vulnerable populations on heat risks persist, including linguistic challenges, cultural barriers, visually inaccessible information, digital literacy, and limited access to the internet and other communication channels. These limitations are particularly salient for elders and unhoused community members who may not have access to a clear, reliable, and accessible source of information during cascading impacts.
- **Insufficient Communication Channels (5):** Discussions repeatedly elevated a gap in communication between the public and private sector, including community organizations and non-profit service providers, regarding preparation for and response to extreme heat events. Participants highlighted a lack of consistent communication about changing weather conditions, especially during compounding disasters, and the resources available to communities on the ground.
- **Limited Capacity for Resource and Donations Management (4):** In times of crisis, public outpouring of support can result in a glut of donations to community organizations. Without a system to distribute those resources, or the infrastructure to store and manage them, community organizations can become overwhelmed.
- **Inaccessibility of Cool Refuges (3):** Spaces that are meant to serve as cooling centers or refuges from heat events and other climate impacts may be located far from vulnerable community members, inaccessible via public transportation, and/or have limited operating hours and capacity. During the wildfires a participant shared the importance of spaces like libraries as an evacuation gathering point, and source of internet and electricity, but with rolling electrical power shutoffs, these could also become vulnerable locations themselves.
- **Extractive Post-Event Assessments (3):** Government surveys after a disaster are burdensome for community members who are simultaneously processing the physical, social, and emotional toll of the event. Requests for community members' time and input, circulated without any clear benefits or follow-up support, can be perceived as extractive and can weaken trust in ways that might impair future partnership and coordination.
- **Limited Institutional Trust (2):** Breakout groups emphasized how distrust in government agencies, messaging fatigue, and negative experiences in interacting with public institutions continue to hinder the delivery and reception of critical communications among at-risk communities, particularly during a time where public spaces and vulnerable populations are under amplified scrutiny.
- **Utility Disruption (2):** Service disruption without advance notice can leave vulnerable populations, such as those with pre-existing health conditions and those reliant on medical devices, facing severe health impacts. While some households reliant on a medical may be ID'ed through Department of Public Health or through relevant utility programs, restoring power on a house-by-house basis remains a challenge due to the broader scale at which the grid operates.
- **Fragmented Information on Available Resources (1):** The jurisdictional divides and wide range of agencies and governments involved in emergency response throughout LA County make it challenging for community partners to identify and track the resources and services available during a heat event.

Summary: Potential Solutions

- **Strategically Timed and Tailored Messaging (11):** Disseminate messaging ahead of extreme heat events, particularly 2-3 days in advance, through public and targeted communication channels to ensure adequate outreach while minimizing messaging fatigue among vulnerable populations. Distribute material with actionable information for individuals, such as 3 actions someone can take within their area to better protect themselves from a heat event. Making these materials visually and linguistically accessible, such as through emphasis of images, large fonts, and multilingual media can help reach a wider audience.
- **Building Capacity of Service Providers and Frontline Outreach (8):** Offer additional trainings and publicly available materials and resources for outreach and service providers to more effectively support preparation and response to heat illness. For example, promotoras, or public health outreach workers, can be equipped with the skills to better educate their communities and stakeholders to understand and identify symptoms of heat illness, ensuring the safety of vulnerable communities during an actual heat event.
- **Preemptive Convening & Partnership (4):** Establish a practice of convening public agencies, trusted community organizations, and other entities, to coordinate communication/outreach efforts and prepare for and respond to the impacts of extreme heat across geographics and vulnerable populations.
- **Localized Resource Coordination (4):** Partner with trusted networks, organizations and community leaders in distributing information that is directly paired with resources to effectively reach vulnerable populations.
- **Mobile and Pop-up Cooling Resources (4):** Deploy mobile cooling solutions, such as mobile clinics, mobile cooling centers, pop-up misting tents and other resources, to reach areas and communities that have barriers to accessing a cooling center or other cooling resources. Bringing resources like mobile clinics into a community can mitigate the barriers of gridlock or traffic jams in accessing resources outside an impacted area.
- **Utility Coordination for High-Risk Households (3):** Work with utilities to communicate information and resources for any potential shut offs, and prioritize vulnerable communities, particularly for areas with high prevalence of households with Durable Medical Equipment (DMEs).
- **Financial Relief for Vulnerable Households (2):** Provide utility debt relief or other financial assistance to vulnerable residents, particularly during the peak heat season.
- **Community-Driven Cooling Access (1):** Promote and support community-run spaces as trusted, familiar alternatives to government-run cooling centers during extreme heat.
- **Direct Relief and Community Assessments (1):** If surveys and After Action Reports will be conducted, pair them with resources that are relevant to impacted communities. Connecting community members with information, assistance, and services that can help them recover from a disaster is an effective strategy for maintaining trust and strengthening the foundation of relationships that will be crucial for emergency response in future disasters.

Conclusion

LA's Extreme Heat Tabletop Exercise brought together public agencies, community partners, service providers and other stakeholders together for the first time to exchange insights on the region's collective response to extreme heat. The gaps and solutions from this community- informed TTX suggest a need to transition from identifying challenges and opportunities to developing concrete action plans, with assigned responsibilities, timelines, and resources, in collaboration with the local municipalities. Ultimately, one the most valuable outcome of this exercise was the development of collaborative relationships between the public and private sectors, working together toward the shared objective of ensuring a safer Los Angeles for all communities across the region. By working to build stronger relationships, and integrate greater engagement with community partners, service providers, first responders, and other relevant stakeholders in extreme heat response planning, communications, and implementation.

Participants during the closing plenary session of the day

Appendix A

LA Regional Heat Tabletop Situation Manual - "Gridlocked and Overloaded"

Appendix B

Organization	Contact	Title/Role
Altamed	Mona Lee	Senior Grant Writer
APEN	K Sanchez	Researcher
City of LA's Climate Emergency Mobilization Office	Marta Segura	Chief Heat Officer
City of LA's Climate Emergency Mobilization Office	Amy Clarke	Deputy Director of Operations
City of LA's Climate Emergency Mobilization Office	Rebekah Guerra Day	Management Analyst, Community Engagement
City of LA's Climate Emergency Mobilization Office	Christine Lee	Policy Analyst
City of LA's Climate Emergency Mobilization Office	Sharis Flores	Intern
City of LA's Department of Recreation and Parks	Melanie Escamilla	Emergency Management Coordinator
City of LA's Emergency Management Department	Nedan Omar Rambo	Emergency Management Coordinator
City of LA's Mayors Office of Public Safety	Jacquelyne Sandoval	Policy Director, Emergency Management
Communities for a Better Environment	Brittany Rivas	Climate adaptation and Resilience Enhancement Coordinator
CORE	Gabriela Gonzalez	Program Coordinator
CORE	Vianney Bernabe	Area Manager, Community and Environmental Equity
Disaster Management Areas (DMACs)	Meena Janmohamed	Area A Coordinator; Emergency Management Manager, City of Beverly Hills
Emergency Network Los Angeles (ENLA)	Lauren Meister	Program Manager
Esperanza Community Housing	Wendy Miranda	Policy Associate
Homeless Healthcare LA	Stephany Campos	Director of Strategic Planning & Special Projects
IDEPSCA	Nancy Zuniga	Health Director
IDEPSCA	Valeria Gutierrez	Health Outreach Coordinator-Climate Lead
L.A. Care	Alex Li	Chief Health Equity Officer
LA County Chief Sustainability Office	Ali Frazzini	Policy Director
LA County Chief Sustainability Office	Andres Gonzalez	Senior Analyst

Organization	Contact	Title/Role
LA County Chief Sustainability Office	Rebecca Ferdman	Sustainability Policy Director
LA County Department of Public Health	Dee Ann Bagwell	Director, Policy & Planning
LA County Department of Public Health	Samir Patel	Analyst
LA County Department of Public Health	Elizabeth Rubin	Epidemiologist/Emergency Planner
LA County Fire Department	William O Gamble IV	Acting Assistant Chief
LA County Office of Emergency Management	Emily Montanez	Associate Director
LA County Office of Emergency Management	Bryan La Sota	Emergency Management Coordinator III
LADWP-Office of Emergency Management	Patrick K. Munongo	Emergency Management Coordinator I
LADWP-Office of Emergency	Johan Torroledo	Water System Engineer
LADWP-Office of Emergency Management	Rafi Meguerdijian	Electrical Engineer Specialist for Power New Business
Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC)	Erin Coutts	Executive Director
National Weather Service	Rose Schoenfeld	Meteorologist
Pacoima Beautiful	Quyen Vo Ramirez	Deputy Director
Physicians for Social Responsibility-LA	Alex Jasset	Energy Justice Director
Physicians for Social Responsibility-LA	Maro Kakoussian	Director of Climate & Health Programs
SAJE	Grace Hut	Assistant Director of Policy and Advocacy, Climate and the Built Environment
SCOPE	Karen Romero	Climate Justice Associate
Trust South LA	Ivana Munugia	Climate Justice Organizer
UMMA Community Clinic	Adria Rossi	Risk and Training Manager
USC Keck School Street Medicine Program	Kate Pocock	Clinical Faculty/PA-C