

Behavioral Design for Public Policy

Robbie, Amina, Nand (Team R.A.N.)

Chicago has a living memory of the ramifications of extreme heat

It used to be an infrequent but disastrous visitor.

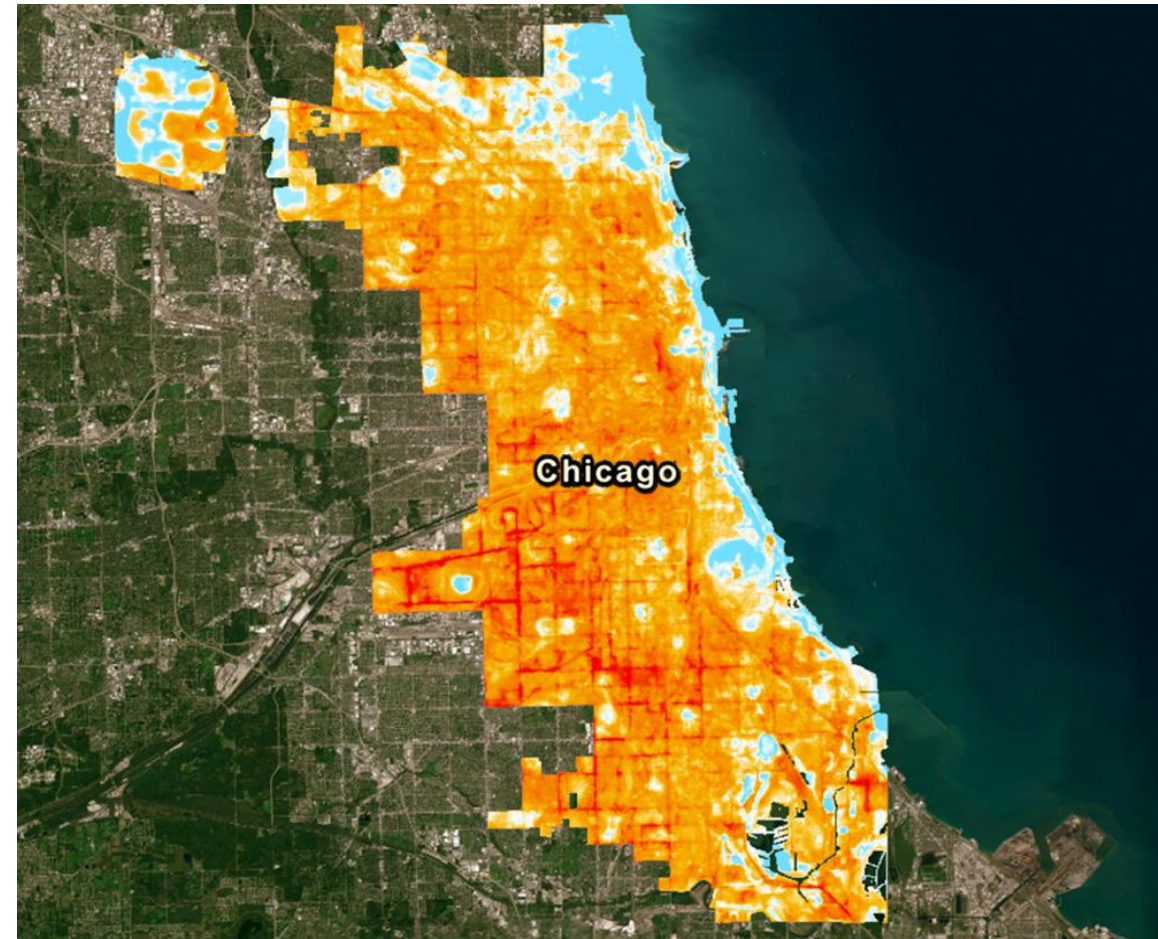
But now extreme heat is here to stay. It's the new neighbor on the block, and we aren't prepared to welcome it.

WEATHER

Extreme heat to persist Tuesday in Chicago area with heat index values near 100 degrees

By Asal Rezaei, Lauren Victory, Albert Ramon, Kylee Miller, Elyssa Kaufman, Chrissy Amaya
Updated on: August 27, 2024 / 12:24 PM CDT / CBS Chicago
<https://www.cbsnews.com/chicago/news/excessive-heat-watch-in-effect-for-chicago-area-with-heat-index-values-near-100/>

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Preparedness starts with **vulnerable populations.**

*And vulnerability comes at a complex nexus of factors, with residents increasingly ill-equipped to cope with the realities they are facing. **The vulnerable are becoming even more vulnerable to heat.***

People (Networks)

- Human + Cultural + Social Capital
- Disparity of social capital in neighborhoods
- Age, health, transience, etc.

Politics (Power)

- Political Capital + networks
- Trust and precedence in relationships
- Inconsistency in resource allocation

Places (Environment)

- Manufactured, Natural Capital
- heat resilience of buildings
- neighborhoods profiles

Possibilities (Resources)

- Financial Capital + Employment
- Agency, Locus of Control
- Resources and Knowledge



LOCUS OF CONTROL: Belief in control over outcomes

Internal locus promotes empowerment through accountability

Internal locus fosters collective action through networks

Internal locus are proactive in relationships and connection

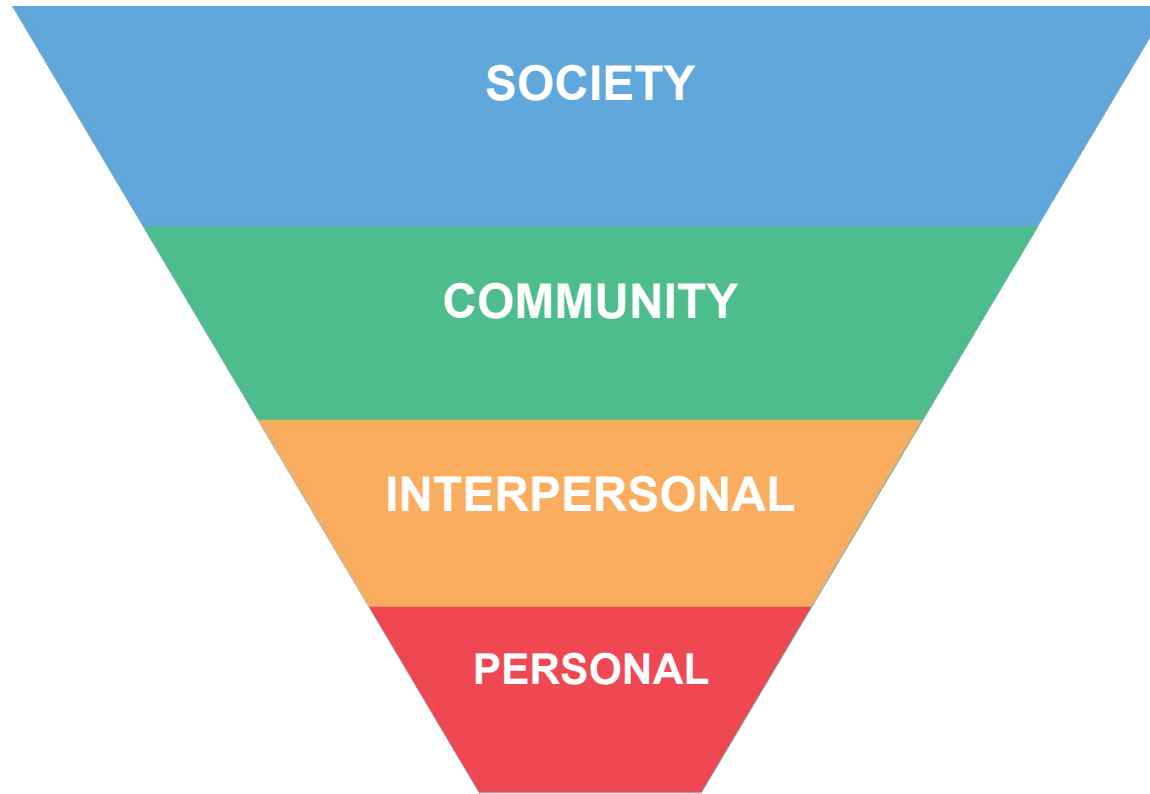
Internal locus drives personal initiative on outcomes

External locus often encourages systemic dependency

External locus can create reliance on external aid

External locus can lead to passivity and social drift

External locus can foster dependence on luck or circumstances



INTERNAL

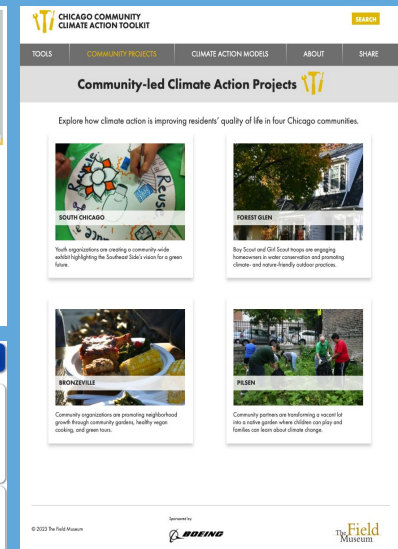
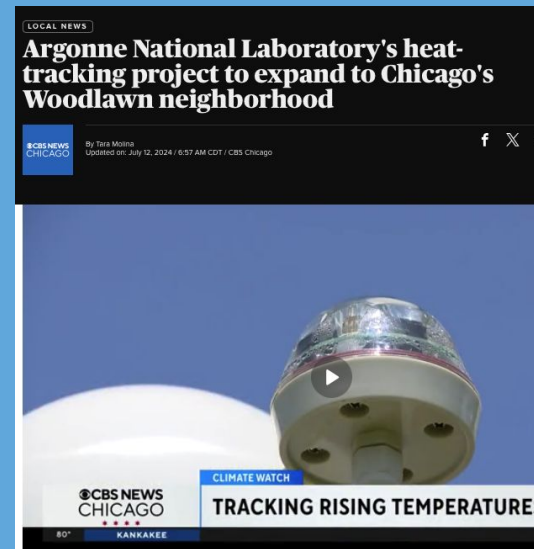
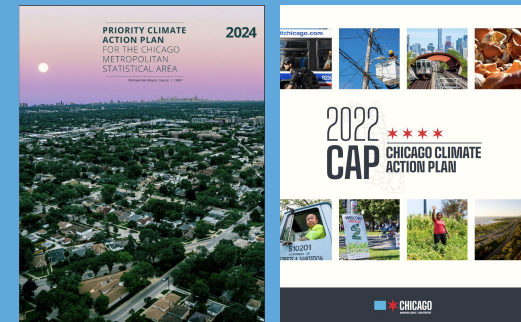


EXTERNAL

It is not like the city is trying to stay unprepared ...

Chicago, within the public, private, and plural sector has plans laid out.

- Chicago Climate Action Plan
- Field Museum awareness campaign
- Heat tracking index Blacks & Green
- Argonne National Laboratory
- CROCUS project



But it's just not working, at least for what is to come.

And that is what we are trying to address, which leads us to wonder...



How might we *leverage informal networks to enhance existing formal structures for climate resilience and extreme heat?*

Introducing Play It Cool

START HERE
START HERE

WASHINGTON PARK 8

Scenario 8 - 12pts

The local retirement community is housed in a very old building. Senior citizens know each other well in within the building, but the AC often goes out on a really hot day, leaving the elderly vulnerable. There also have been recent new reports circulated that have alleged neglect among local nursing home proprietors, with little done in response to resident complaints on various fronts. Nursing homes are in need of more resources to meet the needs of their residents and general standards of adequate care, on normal weather days, but especially on high heat days.

Local organizations have done a lot to take care of their loved ones and the elderly residents of Washington Park, many of whose family member live in nearby homes. Little has been able to bring top-tier resources down to the ground effectively, even when those resources have theoretically been disseminated.

HYDE PARK

Response 3 - 8pts

Local community members have started a grassroots organization on the block where most houses don't have AC. Before a heat spell, they go door to door helping to get the word out about local cooling centers, even offering coordinated transport. These kinds of networks do the best to help neighbors support one another for whatever needs may arise during the extreme heat.

When government aid seems abstract, even to the often well-resourced Hyde Park, neighbors are empowered to knock on other people's doors. These informal networks can also distribute government resources, and they are resources that are wanted. Those resources feel tangibly needed when staying home feels particularly miserable.

HYDE PARK

Response 2 - 8pts

Even with the suggestions by government officials for schools to consider calling a heat day, this private school decides not to close like the nearby schools in the CPS system. There is already some scheduling pressure and administrative changes that have pushed against moving recess to the cooler another time. That being said, recess will be indoors based on guidelines.

Even if school had been canceled last minute, it is difficult for working parents to figure out how to manage when home time they may decide of their own discretion to take their kid out of school if they think it is best.

A recent government-led training in heat response has improved teachers' awareness to help students manage extreme heat during classes. Local resources effectively cool spaces without AC, ensuring comfort. Though cooling centers offer limited help, well-kept trees occasionally enable cross field trips, providing relief and educational opportunities.

WASHINGTON PARK 7

Scenario 7 - 12pts

The local population in Washington Park has a higher risk for chronic conditions, as demographic attributes often indicate a higher level of underlying medical conditions. Many folks on the block feel they spend their days juggling doctor appointments and planning to pick up much-needed medications. Many chronic conditions, like diabetes and heart conditions, may not be highly visible but can put folks at much greater risk for heat-related illness.

Oftentimes, those whose heat tolerance is lower due to the health conditions are not even necessarily aware themselves of that higher risk until they are told. They might not have the luxury of giving that risk due weight in the light of other pressing responsibilities and priorities. And though there is a lot of community capital in Washington Park, stigma around medical conditions can make it hard to get resources or information outside of private channels.

HYDE PARK

Scenario 3 - 10pts

In Chicago, the heat is expected to be very dangerous in the coming weeks. Some folks are worried about an increase in property crime, especially in the high-rise buildings in the area. Many are also concerned about the impact of the heat on the city's infrastructure, particularly the power grid. There is a strong concern that the heat will lead to power outages, which could be particularly dangerous for those who rely on medical equipment. Some of the residents are also worried about the impact of the heat on the city's economy, particularly the tourism industry. They are also concerned about the impact of the heat on the city's environment, particularly the impact on the city's parks and green spaces.

Political Scandal

The **INSTITUTION** isn't able to join the town hall meeting for one turn.

An FBI raid on a powerful Chicago alderman led to racketeering and bribery convictions, implicating the local museum board and eroding community trust in both government and local institutions, fueling resistance to formal communications.

WASHINGTON PARK 6

Scenario 6 - 12pts

The local area is considered to be a food desert, and most people have to travel far to the nearest grocery store. Washington Park has been greatly under-resourced for a long time, even for the basics. Many people in the neighborhood don't have cars and rely on public transportation to get to work and to buy daily life essentials. Oftentimes, the buses in the area are delayed and unreliable, meaning that people have to sit at bus stops for a very long time in order to get where they are going.

This leaves Washington Park residents highly vulnerable to heat as they go about their daily lives. Many have to travel far to get where they need to go. They may not have the option of staying home when things are needed outside the house, despite any guidance given. Having access to the needed general items and resources to stay cool is paramount.

HYDE PARK

Scenario 5 - 10pts

Although efforts have been made to make cooling centers available, the nearest ones to this community are not easily accessible when the temperatures rise. During the latest heat spell, the power has gone out and the efforts by utility companies have been slow to get things up and running again. Now things have been exacerbated for days on end without power.

Folks in Woodlawn have previously tried to use cooling centers with more or less successful experiences. Many Woodlawn community members have a strong porch presence on the block, whether a lot of the actual interactions take place in the neighborhood. It's not uncommon to see residents socializing and in and around their homes during the summer months.

WOODLAWN

Scenario 4 - 10pts

Woodlawn, unlike its neighboring community Hyde Park, has had chronic disinvestment over the years. Still, it has an overabundant supervisor: it has a lot of social capital. Neighbors have lived here for a long time and know each other quite well, creating relationships that have been developed over a lifetime and for generations. They are used to organizing community events and town halls. Political action meetings are well-attended and supported, providing active engagement from the community.

The alderperson of the ward has even run successful weather-related campaigns in the past. Still, this time around there is concern since many residents in the area have to work outdoors for their jobs. Extreme heat this year promises to be worse than in the past, making things even more challenging.

Introducing Play It Cool



A tale of three neighborhoods

Low Risk

Hyde Park

Known for its diversity, academic influence (home to the University of Chicago), and cultural richness, Hyde Park is a **well-resourced neighborhood with a mix of long-term residents and students**. It offers more services, parks, and is generally more affluent than surrounding areas.

Med Risk

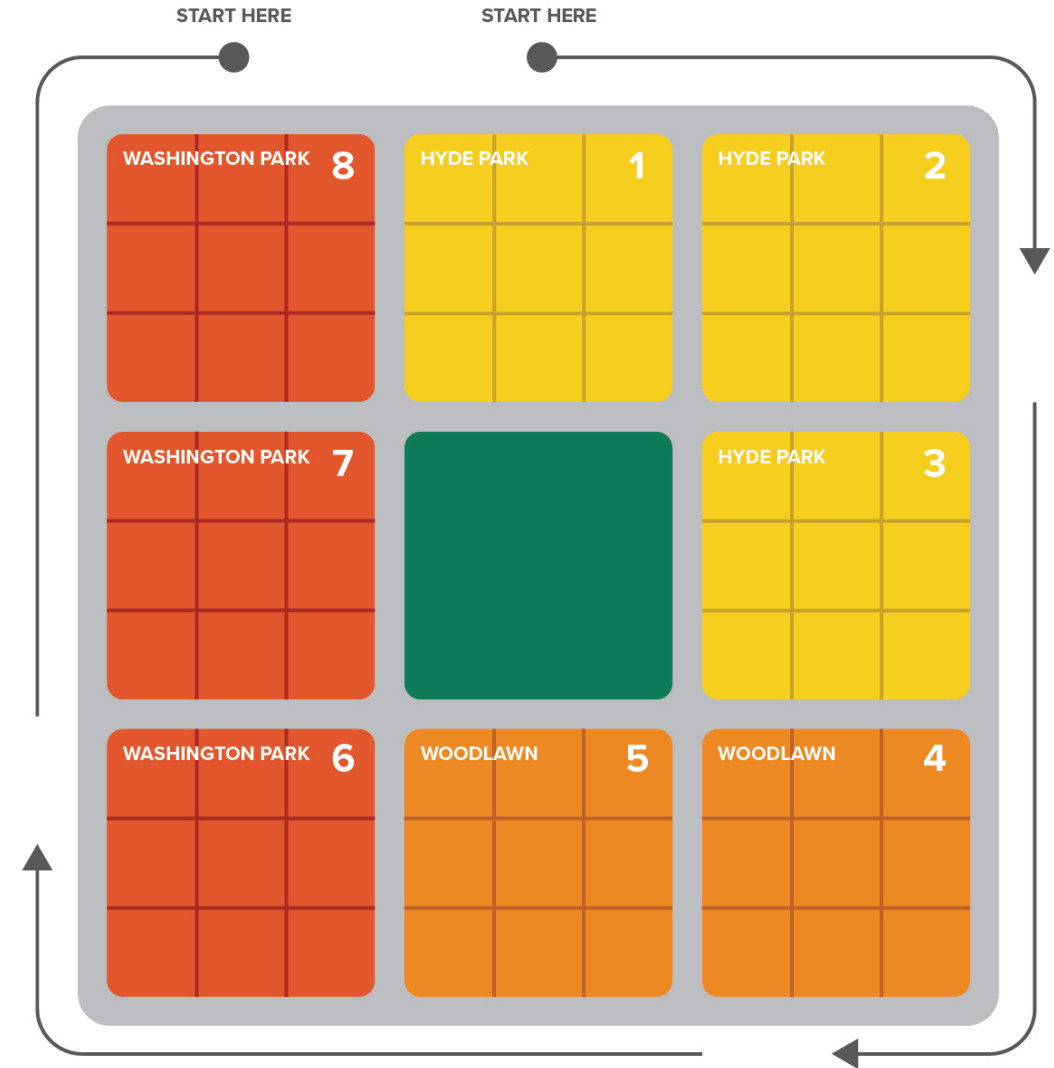
Woodlawn

A historically underserved neighborhood on Chicago's South Side, Woodlawn is facing gentrification due to the Obama Presidential Center. It has deep community roots but **struggles with economic disparity, fewer public resources, and infrastructure challenges** compared to its neighbors.

High Risk

Washington Park

Rich in history and home to one of Chicago's largest and most historic parks, **Washington Park faces challenges with disinvestment in infrastructure and public safety**. Despite its vibrant cultural heritage and central location, it struggles with limited economic opportunities and **even more scarcity of amenities compared to both of its neighbors**.



Game walk-through

Formal: Higher authority, Slower response

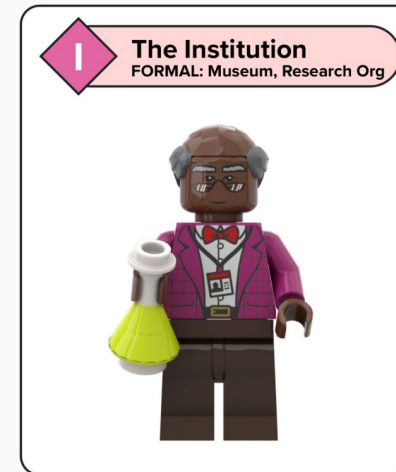
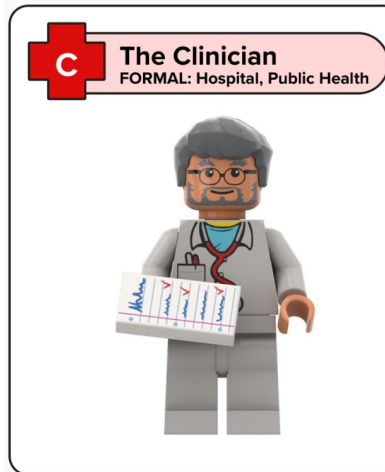
These roles tend to be associated with people whose line of work revolves around heat research or heat wave response. They may or may not live within the community, and have varying levels of understanding of the community needs.

While **they are generally more coordinated when it comes to addressing emergencies, they can be relatively slower to act** due to policies, protocols, and procedures.

Informal: Lower authority, Faster response

These roles tend to be associated with people who live within or have the communities best interest in mind. They may or may not live within the community, but often have a deep understanding of the nuances and complexities it faces.

While **they are generally less coordinated through various channels, they can be quicker to act** due to their inherent proximity, partnerships, and purpose.



Game walk-through

Playing It Cool is a **scenario-based** game.

Chicago, like many other cities, has many neighborhoods, communities and people.

Different contexts present different risk and trade-offs to consider and make decisions around.

Playing It Cool is about the **choices** made.

Each leader in the community making planning decisions have a whole set of unique options available to them. ***They need to decide when to act or not.*** If they choose to act, they need to consider appropriate use of resources.



Game walk-through

Playing It Cool unpacks **outcomes**.

A “great reveal” helps to understand how planning interacts with community responses, determining how effective those planning actions are. Seeing how different interests and actions among leaders play out is part of the result as well.

Scenario 7 (12 points needed)

Chronic conditions stigma

Some people have a lower heat tolerance if they are also dealing with chronic conditions. Many conditions may not be visible but can put folks at much greater risk for heat-related illness and oftentimes they are not even aware of that higher risk. Stigma around medical conditions makes it hard to get resources or information outside of private channels.

WAIT UNTIL NEXT PH
COMMUNITY RE

Scenario 7 - Chronic conditions stigma

Community Response

Having medical clinics and resources nearby is effective because folks at risk best understand their conditions and needs. Government messaging is also effective. Guidelines for outdoor activities and community wisdom are less effective due to the lack of context and the stigma.

Effective Actions



Ineffective Actions



Our Design Intent

Role interactions can create unexpected outcomes, both good and bad.

- You have different actors who are working within their own decision-making contexts, trying to do their best and **triage their tradeoffs**.
- Leaders often have **distinct personal priorities and goals that may conflict** with objectives that would lead to a more positive sum outcome of health and resilience for the whole community.
- There is often **siloed communication** and a lack of information-sharing with other leaders that hinders planning efforts.
- Interactions often don't benefit from **sybiotic collaboration** unless trust is established and relationships are built over time.

Our Design Intent

Communities have the dignity to respond to formal planning in their own way.

- Like leadership roles, people in the community have **their own trade-offs to make** and their own distinct decision-making contexts.
- Different people and contexts respond differently to planning and that's okay, but it means there is **no one-size-fits all approach.**
- Communities already have their own **embedded assets, resources, and sources of information** that are drawn upon in making decisions.
- Networks of **mutual trust and social capital** are built up over time, and from the ground up.

Our Design Intent

Robbie Final Takeaway thoughts

Whether a formal heat response member, an activist in crisis, or a community member, ***we all make tradeoffs to achieve outcomes and mitigate risks.*** We often don't know how different stakeholders may act in a scenario until presented with data.

Amina Final Takeaway thoughts

We greatly overestimate the ability of good intentions to accomplish the things we most hope for in our communities. The reality is that ***pragmatic intentionality and conscientiousness is the bedrock of social capital creation and public sector planning.*** It's what is needed in order to channel individual decision-making toward collective gain.

Nand Final Takeaway thoughts

Things will never go according to plan, despite our best efforts, because they [community members] are on the ground, they know their situation better than us [law and policy people]. What ***we should do is do our best to equip them with resources so they can fight better for themselves.***

How might we help ***foster the recognition and enhancement of social capital in heat preparedness planning for our communities?***

Thank you!

The board game board features several scenario cards with the following titles and point values:

- Scenario 1 - 8pts**
- Scenario 2 - 8pts**
- Scenario 3 - 10pts** (HYDE PARK)
- Scenario 4 - 10pts** (WOODLAWN)
- Scenario 5 - 10pts**
- Scenario 6 - 12pts**
- Scenario 7 - 12pts** (WASHINGTON PARK)

A central card titled "Political Scandal" reads: "The **WASHINGTON** team able to join the town hall meeting for one hour. An FBI raid on a powerful Chicago alderman led to her hearing and bribery convictions implicating the local museum board and eroding community trust in both government and local institutions, fueling resistance to formal communications."

A small figure of a person in a red shirt and green pants stands on the Scenario 3 card. In the background, a sign reads "PLAY IT COOL" with the text "A BOARD GAME ABOUT COMMUNITY ENGAGEMENT AND CLIMATE ACTION" and "DESIGNED BY ROB KINGS, NATTHAPORN NAKTASUKANJAN, AMINA AWAD | ID BEHAVIORAL POLICY FALL 2024".

References

Argonne National Laboratory's heat-tracking project to expand to Chicago's Woodlawn neighborhood

<https://www.cbsnews.com/chicago/news/argonne-national-laboratory-heat-tracking-project-woodlawn/>

Local scientists studying how the Chicago skyline contributes to city heat islands

<https://abc7ny.com/post/new-crocus-project-argonne-national-lab-studies-how-chicago-skyline-contributes-city-heat-islands/15138061/>

Heat & Health Tracker

<https://ephtracking.cdc.gov/Applications/heatTracker/>

Chicago community climate action toolkit

<https://climatechicago.fieldmuseum.org>

Chicago Climate Action Plan

<https://www.chicago.gov/city/en/progs/env/climateaction.html>

->Link to additional sources/ citations <-