



Senior Citizens Advisory Board Agenda

Items listed on the agenda may be taken out of the order presented; two or more agenda items for consideration may be combined; and any item on the agenda may be removed or related discussion may be delayed at any time. Backup material for this agenda may be obtained from LuAnn D. Holmes, City Clerk, at the Office of the City Clerk, 495 South Main Street, 2nd Floor or on the city's webpage at www.lasvegasnevada.gov.

The public is encouraged to send comments electronically prior to the meeting via e-mail to meetingcomments@lasvegasnevada.gov. E-mails MUST contain the meeting name, date and item number in the subject. E-mails received up to an hour before the meeting will be considered public record, read during the meeting where appropriate and will be included in the backup. A time limit may be imposed on the reading of comments as is done during meetings when comments are made in person.

1. **Call to Order and Roll Call**
2. **Announcement Regarding: Compliance with Open Meeting Law**
3. **Public Comment:** Comment during this portion of the agenda must be limited to matters on the agenda for action. If you wish to be heard, come forward and give your name for the record. The amount of discussion, as well as the amount of time any single speaker is allowed, may be limited.
4. For possible action to approve the Final Minutes by reference of the Regular Meeting of February 4, 2021
5. Presentation by Linda Bell, Heart to Heart Insurance Agency, regarding Medicare for seniors
6. Presentation by UNLV regarding project evaluation to identify needs of Las Vegas seniors and barriers to resource connection
7. Presentation by Dr. Chad Kingsley, Southern Nevada Health District, regarding COVID-19 updates
8. Report by Gregory Gray, Community Program Technician, Office of Community Services, regarding senior issues received by the Office of Community Services – All Wards
9. Report by Board members regarding events and senior issues within their Council wards and at large – All Wards
10. Discussion regarding topics for future agenda items of the Board's Senior Living and Senior Outreach Subcommittees. Comments made during this portion of the agenda by individual members must refer solely to proposals for future Subcommittee agenda items and any discussion must be limited to whether or not such proposed items are within the purview of the Board and its Subcommittees and whether such proposed items shall be placed on a future agenda. No discussion regarding the substance of any such proposed topic shall occur and no action shall be taken.
11. **Citizens Participation:** Public comment during this portion of the agenda must be limited to matters within the jurisdiction of the Board. No subject may be acted upon by the Board unless that subject is on the agenda and is scheduled for action. If you wish to be heard, come forward and give your name for the record. The amount of discussion on any single subject, as well as the amount of time any single speaker is allowed, may be limited.

12. **Adjournment**

Facilities are provided throughout City Hall for the convenience of persons with disabilities. Reasonable efforts will be made to assist and accommodate persons with disabilities or impairments. If you need an accommodation to attend and participate in this meeting, please call the City Clerk's office at 702-229-6311 and advise of your need at least 48 hours in advance of the meeting. Dial 7-1-1 for Relay Nevada.

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED AT THE FOLLOWING LOCATIONS
IN ACCORDANCE WITH THE STATE OF NEVADA EXECUTIVE DEPARTMENT
DECLARATION OF EMERGENCY DIRECTIVE 006

The City of Las Vegas website – www.lasvegasnevada.gov
and
The Nevada Public Notice Website – notice.nv.gov



DO YOU KNOW A SENIOR
IN THE COMMUNITY?

THEN YOU HAVE THE
POWER TO SAVE A LIFE.

HELP THE SENIORS IN YOUR LIFE GET VACCINATED AGAINST COVID-19.

The COVID-19 vaccination process can be very confusing. Each county has their own rollout plan with different vaccine locations and sign-up processes and there are scams. *Note that COVID-19 vaccines are free of charge and only available from the county health department or a healthcare provider.* So please help a senior navigate the system and secure their vaccine. Even if it's not yet your turn to get vaccinated, you can help end this pandemic.

START HERE

Reach out to the local seniors you know (relatives, neighbors, parents of your friends who live out of town) and ask if they have a plan to get vaccinated.

NO

1. Visit nvcovidfighter.org or call 2-1-1 for the latest vaccine information in the county where the senior lives.
2. If there is an online sign-up form, walk them through it, or do it on their behalf with their consent.
3. If there is a first-come first-served clinic, ensure they know date/time/location and have transportation.
4. Remind them of their appointment date as it approaches.
5. Make sure they take any required documents (ID, proof of age) to their appointment, as well as supplies for a long wait (medications, snacks, water).
6. Ensure they have transportation to their appointment or offer to take them if you're able.
7. Note the follow-up dose date given by the vaccine provider and if an appointment is required, help them schedule.
8. Ensure they can get to their second appointment.

YES

1. Congratulate them.
2. Review the plan with them and ask if you can assist in any way.
3. Make sure that they have the correct information and access to the correct resources to implement their plan.
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Thank you for being an NV COVID fighter!

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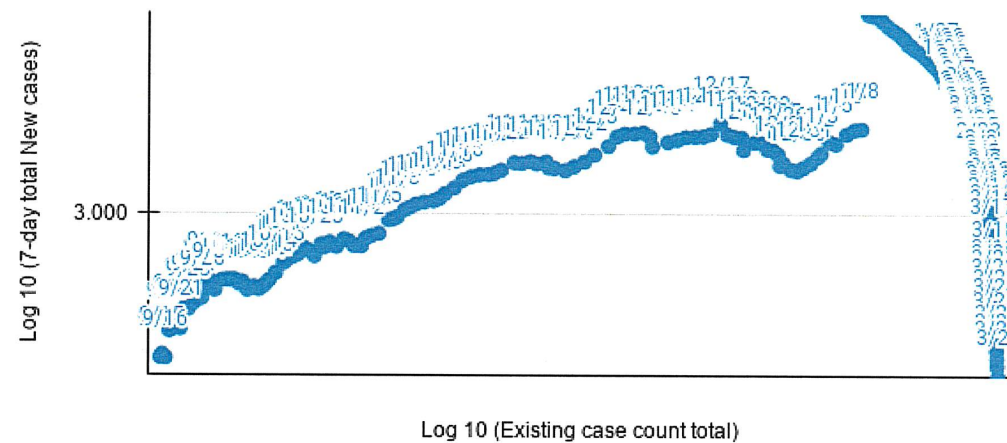
NEVADA
HEALTH
RESPONSE

Submitted At Meeting by
John Perazzo
Date 4/1/21 Item 9

Downtown Las Vegas, NV

ZIP Code, Clark County, NV, COVID-19 Case Counts vs 7-day New Cases (Log x Log scale)

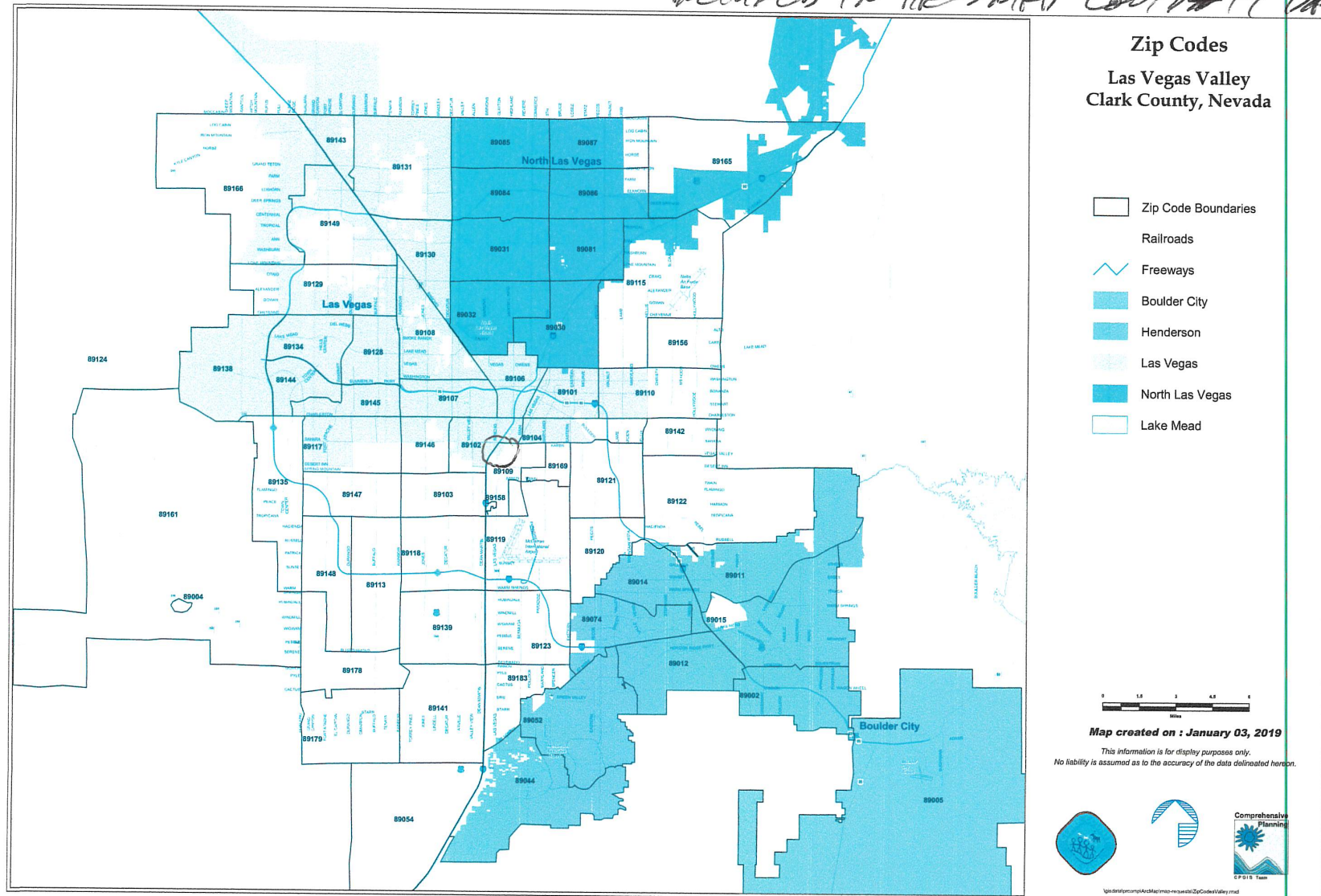
Data from Southern Nevada Health District ZIP Code archives at <https://www.snhd.net>.



zip codes 89101, 102, 104, 106, 107, 108, & 110

20210401

89109 is now included in the SNAI COVID-19 data



Dear Dr. Kingsley,

Thank you again for forwarding my last attempt at prioritizing senior vaccinations in the City of Las Vegas ZIP Codes. I have since found more exact ZIP Code vaccination data by age on the SNHD Covid-19 Dashboard. I also found the most helpful poster promotion, "Do you know a senior in the community?"¹

¹ Do you have a fresh link to this flyer? I found it, downloaded it and lost the link.
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HELP THE SENIORS IN YOUR LIFE GET VACCINATED AGAINST COVID-19.

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Thank you for being an NV COVID fighter!



**NEVADA
HEALTH
RESPONSE**

When ever I present statistics, I hold these truths for all:

Your innocence is unassailable. (I am trying to understand what is understood. How did I do?)

You have a beautiful mind. (In no way do I seek to criticize anyone for what has or has not been done.)

I believe in you.

Peace.

SNHD COVID-19 Vaccine Snapshot data graphs 21115 Clark County, NV

City of Las Vegas ZIP Codes, SNHD, 3/18/2021

ZIP Code	Initiated Vaccine Count	Initiated Percent	Completed Vaccine Count	Completed Percent	50-59	60-69	70+	subtotal 50+	estimated 45+ population	estimated senior initiation
89101	6559	15.40%	2581	6.06%	1243	1323	1238	3804	17,294	22%
89102	7482	18.97%	3706	9.39%	1240	1559	2057	4856	14,440	34%
89104	8658	21.95%	3759	9.53%	1683	1901	1924	5508	16,763	33%
89106	4179	15.78%	2016	7.61%	780	884	987	2651	9,909	27%
89107	10024	25.74%	4694	12.06%	1630	2075	2993	6698	14,910	45%
89108	13866	18.74%	6799	9.19%	2419	2935	3378	8732	29,279	30%
89109	2927	37.24%	1396	17.76%	527	548	711	1786	4,014	44%
89110	14326	20.04%	6272	8.77%	2811	2847	3128	8786	26,763	33%
89117	18193	33.33%	10458	19.16%	2928	3899	5101	11928	28,361	42%
89128	11058	31.00%	6359	17.83%	1825	2347	3027	7199	16,744	43%
89129	15425	27.01%	9131	15.99%	2938	3135	3700	9773	25,546	38%
89130	9521	27.44%	5749	16.57%	1626	2123	3057	6806	17,388	39%
89131	13600	26.90%	8504	16.82%	2557	2919	3475	8951	22,411	40%
89134	13591	55.79%	10082	41.38%	1330	2969	7564	11863	18,755	63%
89138	7872	43.85%	4752	26.47%	1620	1188	1185	3993	6,636	60%
89143	3115	23.48%	1867	14.07%	608	487	586	1681	5,928	28%
89144	7008	35.25%	4373	22.00%	1426	1307	1769	4502	10,487	43%
89145	7475	29.82%	4167	16.62%	1173	1623	2231	5027	12,234	41%
89146	4859	25.99%	2491	13.32%	871	1062	1211	3144	9,157	34%
89149	11601	29.29%	7046	17.79%	1971	2448	2897	7316	16,552	44%
89166	6290	24.92%	3713	14.71%	1002	952	734	2688	4,364	62%

3/31/2021 15:17:32

1

This is the jist of what I was trying to accomplish last month. Here now the data are more precise even if my estimates of the senior proportion of the population are less precise. ZIP Code 89134 seems to be the poster for excellence in vaccine initiation and completion. They also get my top senior completion percentage of 63. ZIP Code 89101 is the puzzle which I cannot explain. It is at the bottom of the barrel for vaccinations initiated, the least completed, and the fewest seniors proportionally.

89101 surrounds Cashman Field, but there are no walk up appointments. (The vaccines are carefully defrosted according to the appointments scheduled?) Appointments are typically made on a smart phone or computer over the internet. Is there a measure of the use of these tools downtown? What other factors can be explored?

My data come from the SNHD Dashboard, Cases page, Dashboard, Vaccine Map, Age Group metric² copying and pasting into Google Sheets.³

Wait! The new day's data are available. Let's compare...

SNHD COVID-19 Vaccine Snapshot data graphs 21115 Clark County, NV

City of Las Vegas ZIP Codes, SNHD, 3/31/2021

ZIP Code	Initiated Vaccine Count	Initiated Percent	Completed Vaccine Count	Completed Percent	50-59	60-69	70+	subtotal 50+	estimated 45+ population	estimated senior initiation	24-hour subtotal 50+ change (Mon - Tue)
89101	6803	15.97%	2682	6.30%	1313	1354	1262	3929	17,294	23%	103.29%
89102	7724	19.58%	3894	9.87%	1296	1603	2075	4974	14,440	34%	102.43%
89104	8939	22.66%	3925	9.95%	1758	1960	1948	5666	16,763	34%	102.87%
89106	4328	16.34%	2104	7.95%	822	913	997	2732	9,909	28%	103.06%
89107	10319	26.50%	4948	12.71%	1699	2127	3012	6838	14,910	46%	102.09%
89108	14348	19.39%	7062	9.54%	2550	3022	3415	8987	29,279	31%	102.92%
89109	3058	38.91%	1456	18.53%	554	567	722	1843	4,014	46%	103.19%
89110	14807	20.71%	6519	9.12%	2931	2921	3176	9028	26,763	34%	102.75%
89117	18637	34.14%	10787	19.76%	3019	3992	5127	12138	28,361	43%	101.76%
89128	11312	31.72%	6563	18.40%	1881	2395	3051	7327	16,744	44%	101.78%
89129	15797	27.66%	9412	16.48%	3034	3195	3720	9949	25,546	39%	101.80%
89130	9755	28.11%	5909	17.03%	1692	2170	3077	6939	17,388	40%	101.95%
89131	13885	27.46%	8698	17.20%	2641	2967	3497	9105	22,411	41%	101.72%
89134	13735	56.38%	10199	41.86%	1367	3007	7571	11945	18,755	64%	100.69%
89138	8050	44.84%	4862	27.08%	1667	1211	1193	4071	6,636	61%	101.95%
89143	3206	24.17%	1932	14.56%	630	498	589	1717	5,928	29%	102.14%
89144	7182	36.12%	4490	22.58%	1476	1340	1780	4596	10,487	44%	102.09%
89145	7639	30.47%	4281	17.08%	1211	1665	2240	5116	12,234	42%	101.77%
89146	5008	26.79%	2590	13.85%	894	1094	1224	3212	9,157	35%	102.16%
89149	11893	30.02%	7250	18.30%	2033	2509	2923	7465	16,552	45%	102.04%
89166	6428	25.46%	3816	15.12%	1023	967	739	2729	4,364	63%	101.53%

Xp.4. IS THIS A MATHEMATICAL ILLUSTRATION? LOW INITIATED VACCINE COUNTS (column 2) WOULD SHOW A HIGHER PERCENTAGE INCREASE WITH EQUAL NEW VACCINES.

3/31/2021 15:42:31

1

I knew it! In every one of the downtown ZIP Codes there has been the most improvement in case initiation. I'm so proud of everyone who is making this possible!

*M. Mayo, Ward 5,
CLC SENIOR ADVISORY BOARD*

² <http://covid.southernnevadahealthdistrict.org/cases/> accessed 3/31/2021

³ SNHD COVID-19 Vaccine Snapshot data graphs 21115 Clark County, NV at https://docs.google.com/spreadsheets/d/1xzoKsRqmNx98_3erhd7KU3k_Zs2KkEP06gdA7ZT9f4Q/edit?usp=sharing

20210401



Heat and Health in American Cities

As Rising Heat Bakes U.S. Cities, The Poor Often Feel It Most

September 3, 2019 · 5:00 AM ET

Heard on All Things Considered



MEG ANDERSON



SEAN MCMINN

[8-Minute Listen](#)
[PLAYLIST](#) [Download](#)
[Transcript](#)


Baltimore's Franklin Square neighborhood is hotter than about two-thirds of the neighborhoods in the city. It's also in one of Baltimore's poorest areas.

Ian Morton for NPR

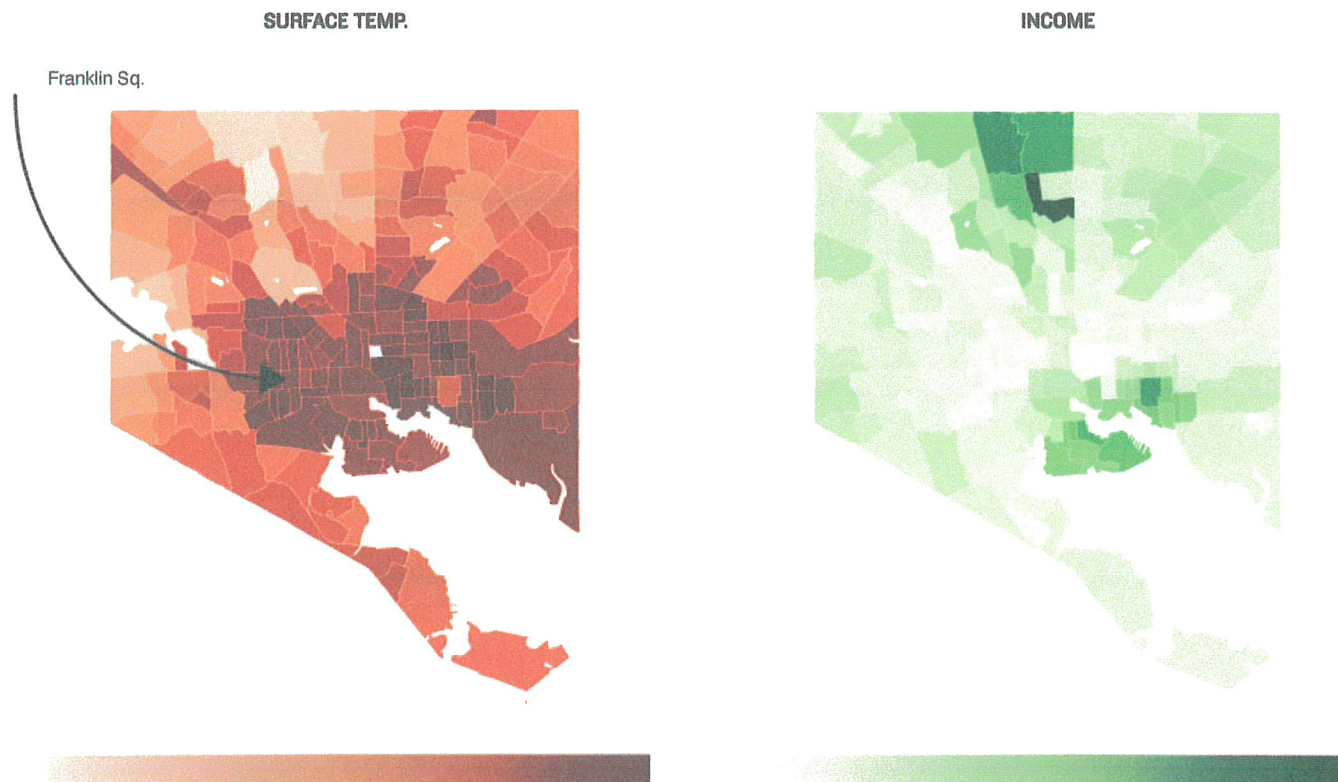
When Shakira Franklin drives from West Baltimore to her job near the city's Inner Harbor, she can feel the summer heat ease up like a fist loosening its grip.

"I can actually feel me riding out of the heat. When I get to a certain place when I'm on my way, I'll turn off my air and I'll roll my windows down," says Franklin. "It just seems like the sun is beaming down on this neighborhood."

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Franklin isn't imagining that. Her neighborhood, Franklin Square, is hotter than about two-thirds of the other neighborhoods in Baltimore — about 6 degrees hotter than the city's coolest neighborhood. It's also in one of the city's poorest communities, with more than one-third of residents living in poverty.

Heat And Income In Baltimore



Across Baltimore, the hottest areas tend to be the poorest and that pattern is not unusual. In dozens of major U.S. cities, low-income neighborhoods are more likely to be hotter than their wealthier counterparts, according to a joint investigation by NPR and the University of Maryland's Howard Center for Investigative Journalism.

Article continues after sponsor message

Those exposed to that extra heat are often a city's most vulnerable: the poorest and, our data show, disproportionately people of color. And living day after day in an environment that's literally hotter isn't just uncomfortable, it can have dire and sometimes deadly health consequences — a fact we found reflected in Baltimore's soaring rates of emergency calls when the heat index spiked to dangerous levels.

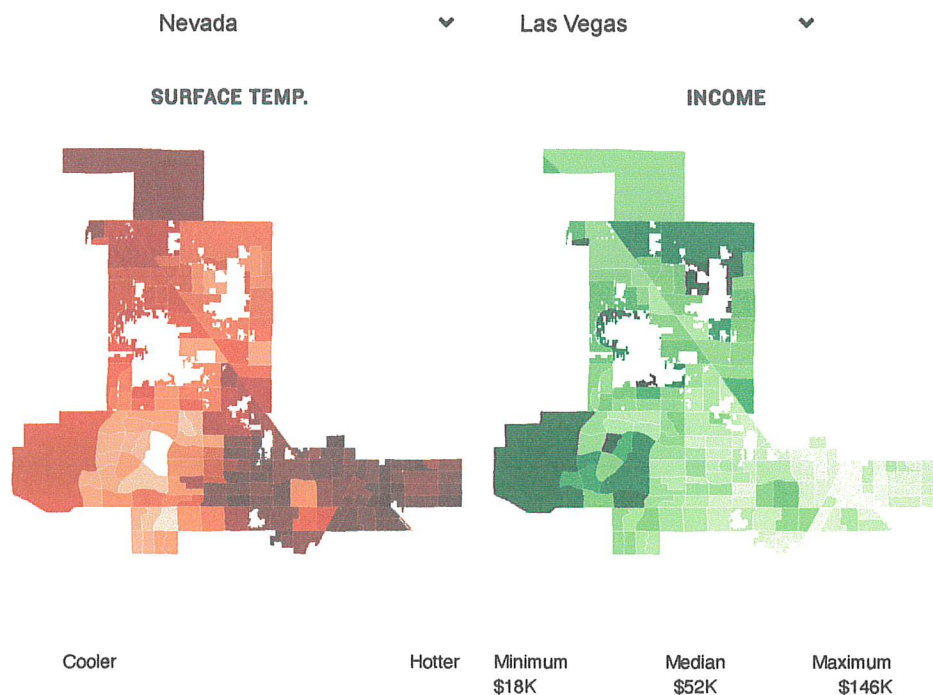
According to a Howard Center analysis of U.S. census data and air temperature data obtained from Portland State University and the Science Museum of Virginia, the hottest neighborhoods in Baltimore can differ by as much as 10 degrees from the coolest.

And Baltimore is not an extreme case. NPR analyzed 97 of the most populous U.S. cities using the median household income from U.S. Census Bureau data and thermal satellite images from NASA and the U.S. Geological Survey. In more than three-quarters of those cities, we found that where it's hotter, it also tends to be poorer. And at least 69 had an even stronger relationship than Baltimore, the first city we mapped.

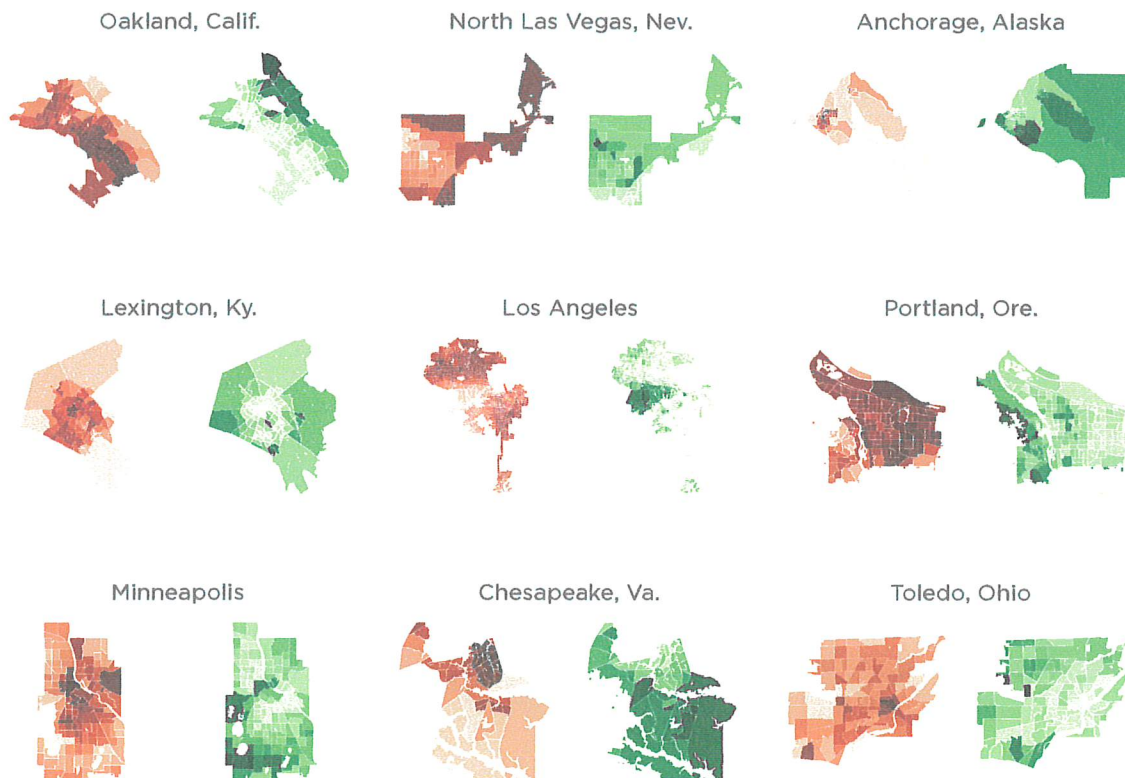
This means that as the planet warms, the urban poor in dozens of large U.S. cities will actually experience more heat than the wealthy, simply by virtue of where they live. And not only will more people get sick from rising temperatures in the future, we found they likely already are.

Heat And Income In Las Vegas

Census tracts in Las Vegas displayed a **STRONG** correlation between heat and income. Las Vegas did not answer questions from NPR.



Tap a small map to view details.



Note: Income measured as median household income per census tract

Source: NASA/U.S. Geological Survey, Census Bureau

Credit: Sean McMinn and Nick Underwood/NPR

"Before I knew it, I was gasping for air"

In the summer of 2018 in Baltimore, when the heat index reached 103 degrees — the threshold deemed dangerous by the National Weather Service — EMS calls increased dramatically citywide for potentially fatal heat stroke. But calls increased for chronic conditions too: EMS calls for chronic obstructive pulmonary disorder (COPD) increased by nearly 70%. Calls for respiratory distress increased by 20%. Calls for cardiac arrest rose by 80%. And those for high blood pressure more than doubled. Other conditions also spiked: psychiatric disorders, substance abuse, and dehydration, among others.

About The Partnership



The heat affected residents citywide, but even when controlling for income by looking only at the patterns of Medicaid patients, there were differences across

the city. From 2013 to 2018, Medicaid

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This story was reported and produced in partnership with the Howard Center for Investigative Journalism at the University of Maryland.

Student and professional journalists at the center spent a year examining the effects of climate change-driven temperature extremes on the health and lives of people in Baltimore.

To read the Howard Center's stories on heat, health and poverty in Baltimore, visit its series website at cnsmaryland.org/code-red.

patients in Baltimore's hottest areas visited the hospital at higher rates than

Medicaid patients in the city's coolest areas. The low-income patients in the city's hot spots visited more often with several conditions, including asthma, COPD and heart disease, according to hospital inpatient and emergency room admissions data from Maryland's Health Services Cost Review Commission.

In the Franklin Square neighborhood of West Baltimore, Shakira Franklin knows the link between heat and health all too well. She says her asthma is triggered by heat.

On a Saturday in July, Franklin says she was making the same drive she often makes from her home to the city's harbor. A heat wave was gripping the city, with temperatures reaching 100 degrees and above. Franklin says she normally tries to stay inside on days like that, but she had to get to work. That's when she had her first asthma attack in nearly five years.

"Before I knew it, I was gasping for air. It doesn't even take me 10 minutes to get from home to my other job. Just like that," says Franklin, who says an attack feels like drinking water through a pinched straw.

Shakira Franklin sits in a lot near her home, where she often takes breaks from her nearby job. Franklin is working to build a splash park in the lot for neighborhood residents to cool off in the summer heat.

Meg Anderson/NPR

"Your windpipe is that straw and that water is the breaths you can take," Franklin says.

"You're trying to bring your air through as much as you can."

Doctors in emergency departments near Baltimore's hotter neighborhoods say they prepare each summer for an increase in heat-related conditions.

"A lot of times the heat played a factor in making a chronic condition acutely worse," says Dr. Amit Chandra, chief of emergency medicine at the University of Maryland Medical Center Midtown Campus. He says that's especially true for cardiovascular conditions.

"The worse your circulatory system is, the worse you are at getting cool," says Chandra, who is also a faculty member at the University of Maryland School of Medicine. A weak or damaged heart might struggle to pump extra blood to the skin so heat can radiate off the body. Even sweating, which also gets rid of heat by evaporation, can put stress on the heart.

Respiratory conditions can become aggravated too, in part, because heat can actually worsen air quality and because conditions like asthma and COPD can be triggered by high heat and humidity.

The Franklin Square neighborhood is hotter than about two-thirds of the other neighborhoods in Baltimore. Citywide, low-income neighborhoods tend to be hotter than wealthier neighborhoods.

Ian Morton for NPR

Chandra says even looking at patients' medical records wouldn't necessarily tell the full story of how heat could be harming their health.

"We wouldn't diagnose them at the end of the day with heat exhaustion or heat stroke necessarily unless their temperature went up," Chandra says. "So there's probably quite a few folks that are affected by the heat, and we're not really tracking or measuring."

Regardless of where they live, people in poverty are more vulnerable to many chronic conditions, including some made worse by heat, like asthma and heart disease.

"Our patients are plagued by poverty, substance abuse and unfortunately some of the patients don't have great access to health care," says Dr. Reginald Brown, chair of emergency medicine at Bon Secours Hospital Baltimore in West Baltimore and a faculty member at the University of Maryland School of Medicine.

"As far as the impact [of heat] to our patients, it's just another thing that complicates their lives," he added.

The urban heat island

Why It's Usually Hotter In A City | Let's Talk | NPR



The way cities are designed can actually make them hotter than their rural surroundings. It's called the urban heat island effect.

NPR via YouTube

Cities in general tend to be hotter than their natural surroundings, thanks to a phenomenon known as the urban heat island.

"If you have less green cover, you will almost always have higher temperatures, and greater exposure to heat," says Brian Stone, director of the urban climate lab at the Georgia Institute of Technology.

Trees provide shade, but they also cool the environment down through the evaporation of water from their leaves — a process similar to how humans sweat to cool down.

"When you pave over an area, particularly if it had green plants, you have interrupted that cycle," Stone says. "Not only have you sealed the surface, you have put a lid on it, so evaporation cannot happen."

Pavement — particularly if it's black — absorbs heat and holds it in. At night, a city of more than 1 million people can be as much as 22 degrees warmer than its surroundings. Even the buildings themselves, Stone says, can create a sort of canyon that traps heat.

Given these elements, Stone says it makes sense that many low-income areas are hotter than richer areas.

"Lower-income parts of the city tend to have less green cover," Stone says. "That's something that we see across a lot of cities."

Differences In Tree Cover In Baltimore

One of the reasons low-income areas of cities are often hotter is that they tend to have less green cover than do wealthier areas.

It's also not unusual, Stone says, for poorer areas to be located near "undesirable land uses" such as nearby highways or industrial areas, which create even more heat.

The pattern of who lives closer to those sources of heat is not just a matter of poor versus rich, it is also often a matter of black and brown versus white. Nationwide, many of the low-income communities NPR found to be hotter — often with fewer trees, more concrete and closer to highways and factories — are also communities of color.

"It wasn't just a coincidence that communities of color end up in some of the most undesirable places," says Miya Yoshitani, executive director of the Asian Pacific Environmental Network, which focuses on environmental justice issues affecting working-class Asian and Pacific Islander immigrant and refugee communities.

HEAT AND HEALTH IN AMERICAN CITIES

Trees Are Key To Fighting Urban Heat — But Cities Keep Losing Them

HEAT AND HEALTH IN AMERICAN CITIES

How High Heat Can Impact Mental Health

Yoshitani explains that policies like redlining — a practice, beginning in the 1930s and banned by the Fair Housing Act in 1968, in which neighborhoods were marked high risk for mortgage lenders in large part based on their racial makeup — forced people of color into less desirable areas. In Baltimore, the city's hottest neighborhoods, many of which are predominantly African American, still line up fairly consistently with the neighborhoods marked "hazardous" on a 1937 map created by the Home Owners' Loan Corp.

"People of color, African American communities, indigenous communities in the beginning and then immigrant communities as they came to the United States were not given a choice about where they could live, where they could raise their families, where they could work," Yoshitani says. "Those choices were made for them and that legacy continues today."

"They can't escape it"

In the majority of the cities NPR mapped, poverty was linked to heat, adding a second layer of risk to an already at-risk population. This is not only because poverty itself is a health hazard, but because poverty is also tied to other factors that can make it harder to get cool.

"People with money, of course, can do that a lot better than people with less money," says Dr. Georges Benjamin, executive director of the American Public Health Association.

Boisey Neal, 12, sells bottled water to passing motorists in Baltimore's McElderry Park neighborhood on July 1. McElderry Park is the city's hottest neighborhood.
Timothy Jacobsen/University of Maryland

He says no one is immune to climate change, but wealthier people can more easily control their exposure to heat by using air conditioning — which on its own contributes to climate change — or even by moving to a cooler part of the city.

"On the other hand, the folks with less money, they're going to be in their one home. And they're going to have to deal with the conditions in their one home," Benjamin says. "If they're going to be in an area where it's real hot, they're going to have to find other ways to adapt, but they can't escape it."

The urban poor, already often in hotter environments and already at higher risk for health problems, will have a harder time escaping climate change.

"It is the most significant public health problem that we have. It's going to be here for a long time. And it's getting worse," Benjamin says.

"This is ours"

There are strategies to cool down a city: investing in public transit, designing roofs that reflect sunlight, and planting more trees, among others.

In Baltimore, the city is working to combat urban heat. The government has installed cool roofs, turned vacant lots into community green space and strategically planted and maintained trees in low-income neighborhoods, among other initiatives. But the city's own arborist told the Howard Center that Baltimore is not on track to meet its goal of increasing the tree canopy to 40% by 2037.

"We're doing a lot with a little," says Anne Draddy, the city's sustainability coordinator.

The neighborhood where Shakira Franklin lives has increased its tree canopy over time. But by 2015, it still was among the city's lowest. Franklin says she's not optimistic the city will be able to cool down her neighborhood anytime soon.

"The city has a lot of responsibility. And I think that we would be close to the bottom of the list to be honest," she says.

Top: Children in Franklin Square play in a temporary splash park. Left: Jami (from left), Louis and Shakira Franklin joke with their neighbors. Right: Thelma Terrell (left) and Daniel Greenspan discuss park design proposals.

Ian Morton for NPR

There's a grassy vacant lot near her apartment where Franklin often takes a break from her job as a landscaping crew supervisor at Bon Secours Community Works, a nearby community organization owned by Bon Secours Health System.

It's one of the few places in the neighborhood with a lot of shade — mainly from a large tree Franklin calls the mother shade. She helped come up with the idea to build a free splash park in the lot for residents to cool down in the heat. Now Bon Secours is taking on the project.

"This was me taking my stand," Franklin says. "I didn't sit around and wait for everybody to say, 'Well, who's going to redo the park?' "

Daniel Greenspan, an architectural fellow working on the project, says they're about halfway to their current fundraising goal — with plans to buy the lot from the city.

On a hot Saturday this summer, Bon Secours and the neighborhood's community association threw a party in the lot. Children ran through streams of water from a pop-up fountain, while adults discussed and voted on potential designs for the new park.

"Our kids, they deserve it," says Franklin, who has two children. "I just feel like it's a long time coming to just have something to say that we built this here for us. This is ours."

Franklin says the park would become a refuge for people who can't escape the heat — and it will indeed be a place to cool off in this neighborhood. But worldwide, heat waves are getting hotter and more frequent, and the past five years have been the hottest ever recorded.

Methodology

To determine the link between heat and income in U.S. cities, NPR used NASA/U.S. Geological Survey satellite imagery and U.S. Census American Community Survey data. An open-source computer program developed by NPR downloaded median household income data for census tracts in the 100 most populated American cities, as well as geographic boundaries for census tracts. NPR combined these data with TIGER/Line shapefiles of the cities.

The software also downloaded thermal imagery for each city from NASA's Landsat 8 satellite, looking for days since 2011 in June, July and August when there was less than 4% cloud cover. NPR reviewed each of the satellite images and removed images that contained clouds or other obscuring features over the city of interest. In cases when there were multiple clear images of a city, we used the thermal reading that showed a greater contrast between the warm and cool parts of the area of interest. In cases where there were no acceptable images, we manually searched for additional satellite images and found acceptable images from Landsat 8 for every

city except for *Hialeah and Miami, Fla., and Honolulu, which are frequently covered by clouds.*

For each city, NPR aligned the satellite surface temperature data with the census tracts. For each census tract, the software trimmed the geography to only what is contained within the city of interest's boundaries, then removed any lakes, rivers, ocean, etc. It calculated a median temperature reading for each census tract. When all of the tracts in a city were completed, it calculated a correlation coefficient (R) of the tracts to find the relationship between income and heat.

The satellite data measure temperature at a surface, such as the ground or a rooftop. We used this measurement rather than ambient temperature, which measures the air about 2 meters above the ground. Measuring air is a more accurate measure of how people experience heat, but satellite data are more widely available than air temperature data. Using that data allowed us to provide a more complete snapshot of temperature trends across many cities.

View NPR's full data and code on Github.

To determine the relationship between heat and poverty in Baltimore, the Howard Center for Investigative Journalism used block-by-block temperature data showing variations in Baltimore's urban heat island captured by researchers at Portland State University and the Science Museum of Virginia on Aug. 29, 2018. For each "community statistical area" in Baltimore, the Howard Center computed a median temperature and joined it to a U.S. Census American Community Survey data set with the poverty rate for each area and then calculated the correlation coefficient (R).

NPR's Nora Eckert and Nick Underwood; and the Howard Center's Sean Mussenden, Roxanne Ready and Theresa Diffendal contributed to this report.

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