

WATER & HEALTH IN LITTLE VILLAGE

An Environmental Justice Study



Photo Credit: Karen Canales Salas, Calavera Studios

LVEJO 

CNT 

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By Little Village Environmental Justice Organization and Center for Neighborhood Technology

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INTRODUCTION

This study compares health and water-related conditions in Little Village to the Near North Side, and to Chicago city-wide. Chicago neighborhood data is reported by “community area”: 77 areas with defined boundaries that can include one or more neighborhoods. Little Village is within the South Lawndale community area. After reviewing health and water data all 77 community areas, the Near North Side community area was selected for comparison to South Lawndale, to illustrate the stark differences that exist between Chicago’s neighborhoods.



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COMMUNITY OVERVIEW

People & Local Economy

In the late 19th and early 20th centuries, South Lawndale was home to German, Czech and Polish residents. By the 1970s, the population had shifted to become a mostly Mexican community.ⁱ Today, South Lawndale is home to nearly 75,000 Chicagoans. Cook County Jail, located in the southeast corner of the community, is one of the largest jails in the country. The jail's daily population averages more than 6,000 people.ⁱⁱ

South Lawndale's economy was historically supported by industrial plants, which contributed to poor air quality and soil contamination.ⁱⁱⁱ Some of the plants closed in the late 1960s, leading to an economic downturn in South Lawndale. Currently the Little Village Industrial Corridor, a transportation and industrial hub that consists mostly of manufacturing and shipping sectors, sits along the southern border.^{iv} Long a home of skilled trades workers,^v many residents continue to earn their living in manufacturing, administration, and accommodation and food service sectors.^{vi} Today, 50% of South Lawndale households earn less than \$33,851.

The Near North Side, a predominantly white community, is home to more than 85,000 Chicagoans. Like South Lawndale, it also contains an industrial corridor. However, the North Branch Industrial Corridor has contained mostly information and technology sectors since 2011.^{vii} Residents mainly work in the professional, scientific, and technical services, and finance and health care sectors.^{viii} Today, 50% of households make less than \$102,124 — **three times** the income of South Lawndale residents.

Figure 1. South Lawndale is outlined in red. The Near North Side community area is outlined in blue.

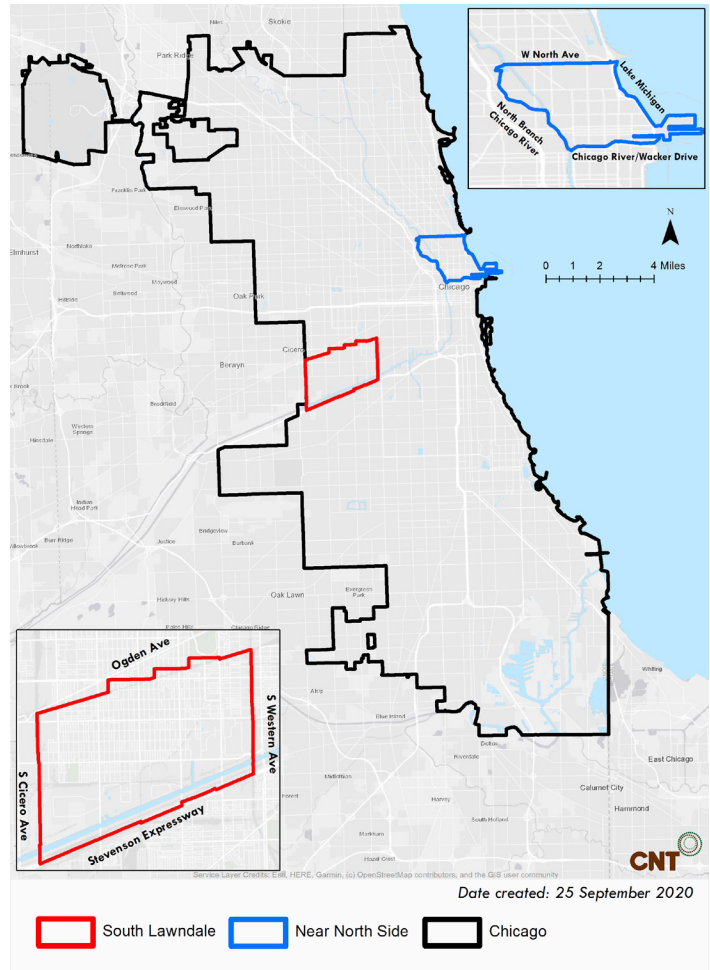


Table 1. Median Household Income of Households, 2018; Race and Ethnicity of Residents, 2018

	South Lawndale		Near Northside		Chicago City-Wide	
Median Household Income (50% of Households make less than)	\$33,851		\$102,124		\$55,198	
Race / Ethnicity	Percent	Count	Percent	Count	Percent	Count
<i>Total Population</i>	100%	74,943	100%	85,829	100%	2,718,555
Latinx or Hispanic	83%	62,345	6%	4,947	29%	788,140
Black or African American, non-Hispanic	12%	9,124	8%	7,072	30%	808,165
White, non-Hispanic	4%	3,058	71%	61,078	33%	892,323
Two or more races	<1%	286	2%	1,877	2%	47,950
Asian	<1%	112	12%	10,473	6%	172,991
American Indian and Alaska Native	<1%	18	<1%	0	<1%	3,160

Source: U.S. Census, American Community Survey, 5-Year estimates (2018)

Housing

South Lawndale has a mix of mostly single-family homes and 2- to 4-flat buildings. About two-thirds of housing is occupied by renters. Most homes are older, built before 1939. Very few new homes have been built since 2000.

Near North Side housing is mostly very large buildings (50 or more housing units). Most housing was built after 1960, with a quarter built after 2000. Slightly more than half of housing is occupied by renters. Overall, Near North Side has about 3 times as many housing units as South Lawndale.

Table 2. Housing Occupancy, Age, and Type, 2018

	South Lawndale		Near Northside		Chicago City-Wide	
Home Occupancy	Percent	Count	Percent	Count	Percent	Count
Total Occupied Housing Units	100%	17,946	100%	53,156	100%	1,056,118
Owner-occupied	36%	6,537	43%	22,902	45%	474,852
Renter-occupied	64%	11,409	57%	30,254	55%	581,266
Age of Housing						
Total Residential Buildings	100%	20,830	100%	63,319	100%	1,208,839
Built 1939 or earlier	75%	15,701	15%	9,680	43%	515,931
Built 1940 to 1949	6%	1,241	2%	1,272	9%	112,391
Built 1950 to 1959	6%	1,199	5%	3,072	12%	145,838
Built 1960 to 1969	4%	767	12%	7,709	10%	117,800
Built 1970 to 1979	4%	860	15%	9,395	7%	87,320
Built 1980 to 1989	3%	600	12%	7,322	4%	50,181
Built 1990 to 1999	1%	258	11%	7,281	5%	57,005
Built 2000 to 2009	1%	161	22%	14,072	8%	97,965
Built 2010 or later	<1%	43	5%	3,515	2%	24,408
Type of Housing						
Total Residential Buildings	100%	20,830	100%	63,319	100%	1,208,839
Single-family, Detached	19%	3,917	2%	1,529	26%	314,057
Single-family, Attached	2%	388	3%	1,740	3%	42,194
2-Flat	36%	7,583	1%	517	14%	174,968
3 or 4-Flat	31%	6,356	2%	1,181	15%	180,279
5 to 9 housing units	9%	1,911	3%	1,765	12%	141,747
10 to 49 housing units	1%	265	9%	5,974	11%	129,967
50 or more housing units	2%	354	80%	50,587	18%	223,049

Source: U.S. Census, American Community Survey, 5-Year estimates (2018)

ISSUES IMPACTING THE COMMUNITY

Little Village residents have expressed concerns to LVEJO around the following issues.

- COVID-19;
- Lack clean, running water at home for personal hygiene, cooking, and drinking; and
- Polluted rain running off from industrial sites.

The section examines the publicly available data for these issues. Data was available by ZIP Code, rather than by community area, and so is reported for the ZIP Codes that intersect with the community area.



Photo Credit: CDC

COVID-19 Pandemic

South Lawndale has experienced one of the most severe COVID-19 outbreaks in all of Chicago. Between March 1, 2020 through August 1, 2020, South Lawndale ZIP Codes reported over 9,000 COVID-19 infections and over 300 COVID-19 deaths. South Lawndale's infection rate was approximately 1.7 times the city-wide infection rate —and **3.5 times higher** than the Near North Side's infection rate. During the same time period, South Lawndale's COVID-19 death rate was approximately 1.26 times the city-wide rate — and **5 times higher than** the Near North Side death rate.

South Lawndale residents have reported serious respiratory health problems during previous LVEJO campaigns. Residents have also shared concerns about the relationship between their pre-existing respiratory

issues, local air pollution, and greater suffering if they test positive from COVID-19.^{ix} There are several sources of air pollution in the neighborhood, including industries in the industrial and shipping corridor,^x vehicle emissions from the Stevenson Expressway and local roads,^{xi} and the former Crawford Power Generating Station coal-fired power plant.^{xii} In April 2020, the demolition of the former Crawford station resulted in an implosion that released a dust cloud covering six city blocks,^{xiii} increasing residents' worries.^{xiv} Residents' concerns about the link between pollution and COVID-19 are well-founded — a national study demonstrated a significant link between areas with higher air pollution and higher COVID-19 deaths.^{xv}

Figure 2. COVID-19 cases per 100,000 people by ZIP Code (March 1 - August 1, 2020)

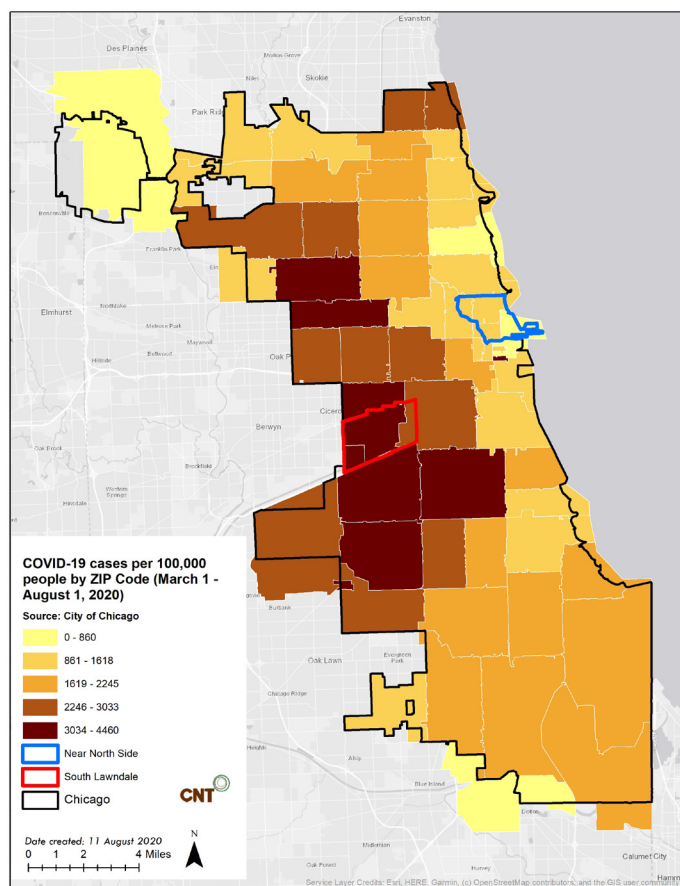


Figure 3. COVID-19 deaths per 100,000 people by ZIP Code (March 1 - August 1, 2020).

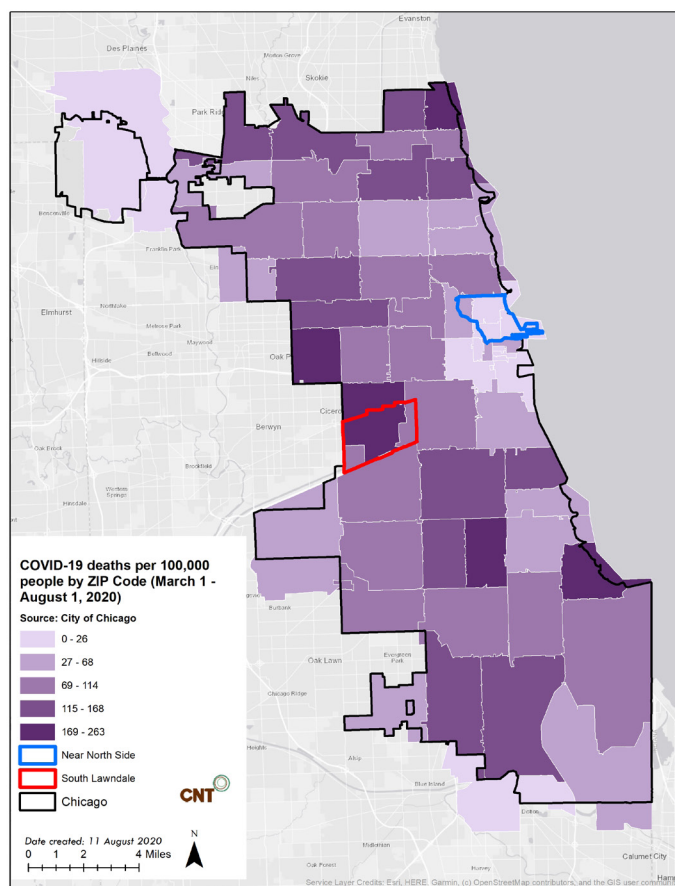


Table 3. Rate of COVID-19 Cases and Deaths, March 1 to August 1, 2020, Chicago ZIP codes

	South Lawndale ZIP codes	Near Northside ZIP codes	Chicago City-Wide
COVID-19 Cases per 100,000 people	3,745	1,081	2,228
COVID-19 Deaths per 100,000 people	127	25	101

Source: Chicago Department of Public Health, COVID-19 Cases, Tests, and Deaths by ZIP CODE (Aug 12, 2020).

Clean Drinking Water



Up until recently, the City of Chicago disconnected drinking water service to homes with unpaid water bills. In a twelve-year period, nearly 3,000 water shutoffs happened within South Lawndale. South Lawndale's water shut-off rate is approximately 1.2 times the city-wide rate — and **52 times higher** than the Near North Side.

In May 2019, mayor-elect Lightfoot declared a moratorium on drinking water shut-offs at Chicago residences.^{xvi} In July 2020, the City announced the Utility Billing Relief Program, which offers reduced rates on water taxes, protection from late fees and debt collection activity, and conditional debt forgiveness, for income-qualified residents that own and reside in a single-family or 2-flat home.^{xvii} As of the date of report publication, no information has been identified concerning the number of households that have had their water service reconnected.

Figure 4. Total Water-Shut Offs by ZIP Code (2007-2018).

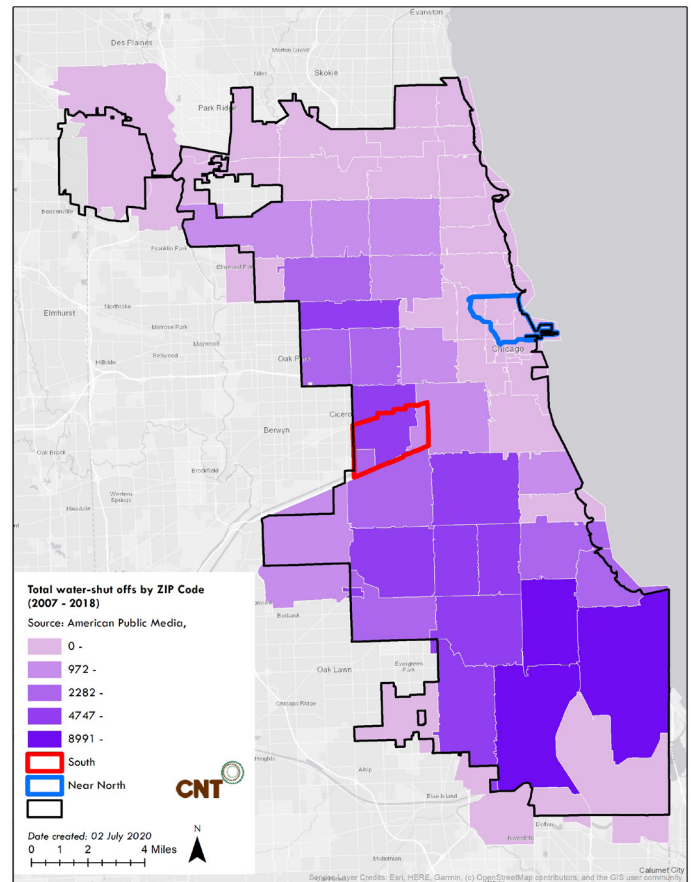


Table 4. Rate of Water Shut-Offs, 2007-2018, Chicago ZIP codes

	South Lawndale ZIP codes	Near Northside ZIP codes	Chicago City-Wide
Water Shut-Offs per 1,000 Households	161.8	3.1	135.0

Source: American Public Media, WBEZ.

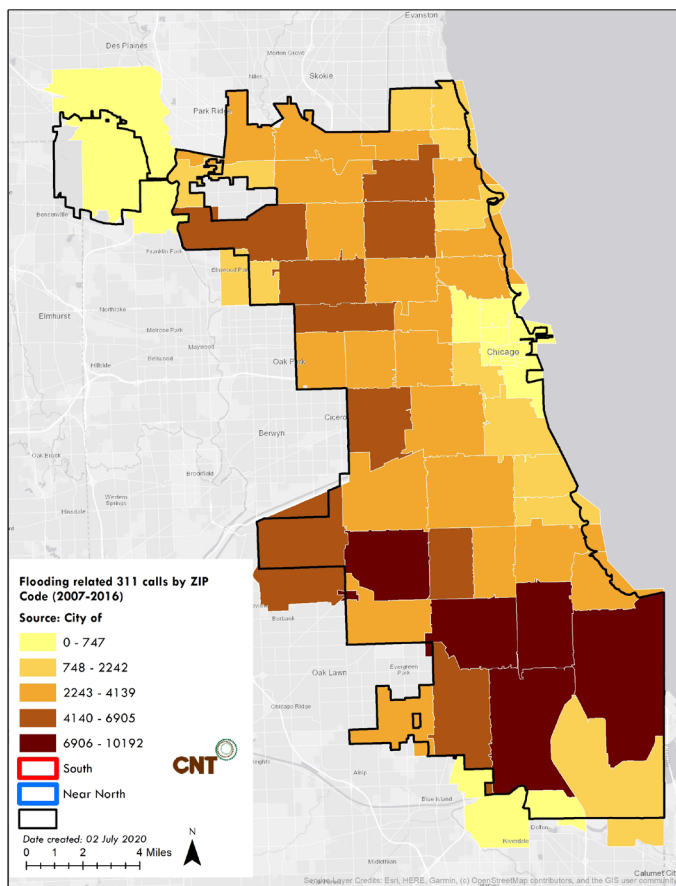
Flooding

In Chicago, most flooding is urban flooding – flooding that happens when the local sewer system cannot cope with the amount of rain during a storm. This type of flooding is unrelated to the Chicago River or Lake Michigan. Chicagoans experience urban flooding as sewage backing up through basements, rain flowing under basement doors and windows, and impassable streets or underwater yards. Flooding causes property damage, lost work time,^{xviii} and physical and mental health issues.^{xix} Flooding can cause mold in homes, which is linked to respiratory problems, especially for the elderly and children.^{xx} South Lawndale’s proximity to an industrial corridor with heavy manufacturing industries, could also result in polluted runoff.^{xxi}

South Lawndale residents experience markedly worse quality of life in the areas of COVID-19, drinking water access, and local flooding.

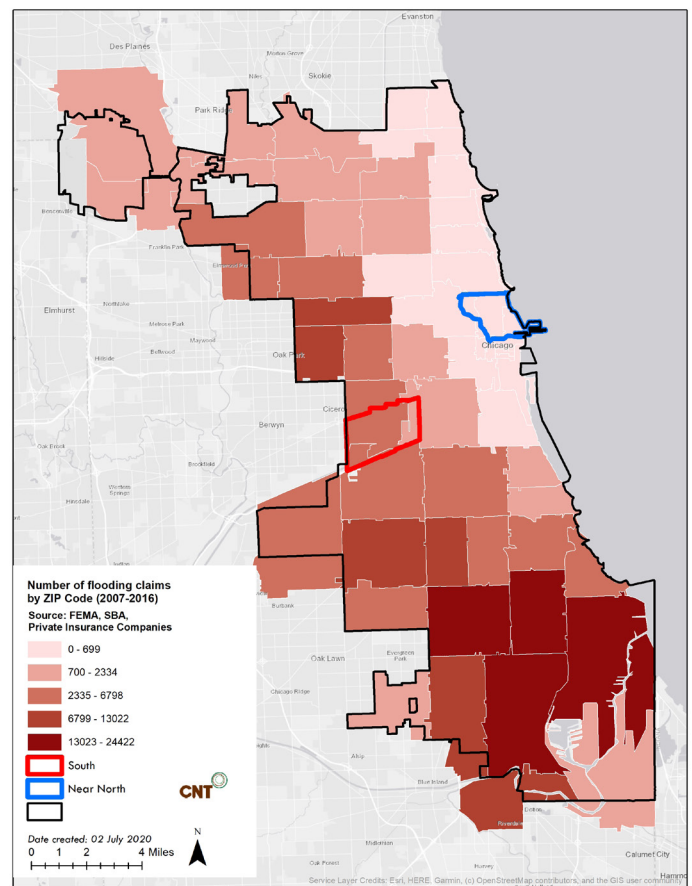
Residents can report home and street flooding through Chicago’s 311 system. In one month alone, May 2020, nearly five thousand flood-related 311 calls were made by Chicagoans.^{xxii} South Lawndale’s 311 flood call rate is slightly lower than the city-wide rate, but **6 times higher** than the Near North Side.

Figure 5. Flooding-related 311 calls by ZIP Code (2007-2016)



*Map with data at the block group level included in Appendix A

Figure 6. Number of flooding claims by ZIP Code (2007-2016)



*Map with data at the block group level included in Appendix B

Table 5. Rate of COVID-19 Cases and Deaths, March 1 to August 1, 2020, Chicago ZIP codes

	South Lawndale ZIP codes	Near Northside ZIP codes	Chicago City-Wide
311 Flooding-related calls per 1,000 Households	151.3	25.3	175.6
Flooding Claims per 1,000 Households	160	3	211

Source: Chicago Department of Public Health, COVID-19 Cases, Tests, and Deaths by ZIP CODE (Aug 12, 2020).



CNT also studied insurance payments made for flood damage to homes, over a ten-year period in Chicago. Across Chicago, insurance companies paid out more than \$400 Million for flood-related damages. However, **87%** of the insurance payments were made in communities of color.^{xxiii} During this time period, South Lawndale ZIP Codes received nearly 12,000 flood-related insurance payments. South Lawndale's insurance payment rate is slightly less than the city-wide rate — but **53 times higher** than the Near North Side rate.

This data likely undercounts the extent of flood damage in some communities. Flood insurance payment data does not include uninsurable or rejected claims, or flooding experienced by uninsured (or underinsured) tenants and building owners. In addition, 311 call data depends on residents' knowledge of the 311 flood complaint system, belief that reporting flooding is a valuable use of their time, and personal comfort in voluntarily contacting a City agency.

The Link between Health, Jobs, Water, and Housing

Nationwide, COVID-19 has exposed the existing systemic inequities in our communities. Black, Latinx, and Indigenous people have higher rates of COVID-19 infections and deaths across the U.S.^{xxiv} There are complex reasons for these persistent disparities. The Center for Disease Control (CDC) refers to these reasons as “social determinants of health,” stating: “discrimination exists in health care, housing, education, criminal justice, and finance.”^{xxv}

Healthcare

A 2018 national study demonstrated that Latinx individuals had the lowest rate of health insurance coverage of all racial and ethnic groups in the U.S.^{xxvi} Research has also documented a lower quality of medical care for people of color.^{xxvii}

Jobs

A recent CMAP analysis of the six-county region found that many essential workers live in lower-income communities, and essential jobs are disproportionately held by people of color. CMAP found that over half of South Lawndale’s working residents are classified as “essential workers” whose jobs cannot be done by working from home.^{xxviii} These workers are exempted from the state executive order to stay home and work remotely.^{xxix} These essential workers have a greater risk of being exposed to COVID-19, and becoming infected or transmitting the virus to household members.^{xxx}

At the same time, South Lawndale residents who worked in the hospitality and food service sectors^{xxxi} may have been laid off^{xxxii} due to economic losses from the pandemic. Those who are still able to work may be in part-time jobs that do not provide health insurance or paid sick days. Nationally, 64% of service workers had paid sick leave in 2019, as compared to 94% of management workers.^{xxxiii}

Hygiene

Water is a human right; a necessity for communities to thrive.^{xxxiv} The CDC has advised people to reduce their risk of COVID-19 infection by practicing frequent handwashing.^{xxxv} Yet, not all South Lawndale residents can access clean water at their home.

Although the City of Chicago has issued a moratorium on water disconnections, it is unknown how many residents remain without running water at home.^{xxxvi} Further, after the Crawford site demolition in April 2020, South Lawndale residents raised concerns about their tap water. Residents reported to LVEJO that they noticed changes in smell, taste, and quality,^{xxxvii} and the city acknowledged that the implosion may have released stagnant water in pipes.^{xxxviii} Without clean running water, residents lack an essential tool to reduce transmission of COVID-19.

Housing

The CDC guidelines recommend that, if a household member is infected but can recuperate at home, that they should be isolated in a separate bedroom and bathroom.^{xxxix} However, South Lawndale residents live mostly in older single-family homes and two to four-flat apartments. In larger or multigenerational households, it may not be possible to follow this recommendation.^{xl}

Furthermore, urban flooding can impact the quality and safety of housing. Flooding can create moldy conditions at home,^{xli} exacerbating pre-existing respiratory problems.^{xlii} Those with poor respiratory health are also more likely to face worse COVID-19 outcomes.^{xliii} Flooding also damages critical home systems like water heaters and furnaces.^{xliv} If flooding is so severe that it requires evacuation, residents may have to find temporary housing where COVID-19 prevention practices are more difficult to maintain.^{xlv}

COVID-19 has spotlighted several issues that residents of South Lawndale were already experiencing. Creating piecemeal policies to address these issues separately fails to acknowledge address the cumulative effects of these burdens, and the history of systemic inequity. To repair these harms, there must be an integrated set of strategies that work across the siloes of health, economic well-being, and environmental justice.

Reducing Community Risks: Building a more Resilient South Lawndale

To help South Lawndale's resiliency in the wake of the COVID-19 pandemic and water-issues, there are several policies that can be implemented by the City of Chicago.

1. **Ensure that all homes are reconnected to a clean water supply and permanently halt shutting off water due to household inability to pay water bills.**

The city must create a plan to identify which homes had been shut off and are not yet reconnected and provide immediate access to bottled water. The city should help residents get their homes reconnected to the city's water supply, whether that means simply turning the water back on, suggesting affordable plumbers for older disconnections, or partially and fully paying plumbers to connect houses back to the water supply. Additionally, the city should pass a law never to shut off the water in the future, particularly for low-income customers struggling to pay their bills, and develop a program to ensure that residents receive prompt city response, including free water quality testing, when they have concerns about water quality and plumbing.

2. **In the near term, Chicago's Utility Billing Relief program should be restructured to facilitate enrollment and expanded to include renters.**

The city began the Utility Billing Relief program to help low-income homeowners reduce their water, sewer, and water-sewer tax, and provide debt relief. However, this program is only open to homeowners. As mentioned, 64% of housing in South Lawndale is renter-occupied. The only way for renters to access this program is if they have strong, positive relationship with their homeowner. This may not always be the case; therefore, the city needs to provide low-income renters with an opportunity to participate in the program. Additionally, the program should seek to reduce residents' administrative burden of applying to ensure maximum participation. The Utility Billing Relief program allows for debt forgiveness of overdue water bills following one full year without missed payments. However, this assistance should be immediate and non-contingent on an individual's ability to prove whether they can maintain payments for a full year or not. Individuals who currently have overdue payments need financial assistance as a result of the unaffordable water rate structure. Requiring payment in order to access debt forgiveness is a large barrier to participation and limits the benefits of the program to these households. Instead, the individuals should be ensured access to water and the necessary resources to maintain their livelihoods through permanent, equitable rate reform.

3. **Equitably invest in green stormwater infrastructure and other flood mitigating practices.**

The city should commit to funding and developing green stormwater infrastructure where possible in South Lawndale and other communities at risk for flooding to decrease flood damage and mitigate adverse public health and economic consequences of exposure to polluted floodwaters due to nearby industrial sites. Building and maintenance of green stormwater infrastructure can create high quality, local jobs, and opportunities for land stewardship, as well as improve the local economy and public health, among several other factors. Additionally, the city should subsidize the cost of sewage backflow prevention devices and permits to install such devices in homes, particularly for low-income households.

4. **Expand research on flood risk management strategies for former brownfield sites.**

Neighborhoods across Chicago where industrial and residential land uses are proximate to each other are particularly at risk for heightened consequences of flooding. For example, La Villita Park in South Lawndale was developed on a former superfund site of Celotex, an asphalt roof tile-producing company. As one of the few open green spaces in the community, it provides an array of environmental and societal benefits; however, the site experiences major flooding issues, and its elevated surface causes water to run off into residential areas. Prior to the community-led remediation of this site, flooding basements and yards across from the park regularly exposed community members to illness. There should be expanded research deployed by and with impacted communities on policy solutions focusing on green infrastructure and low-impact development on former brownfield sites to improve urban flooding impact in neighborhoods burdened with environmental harms.

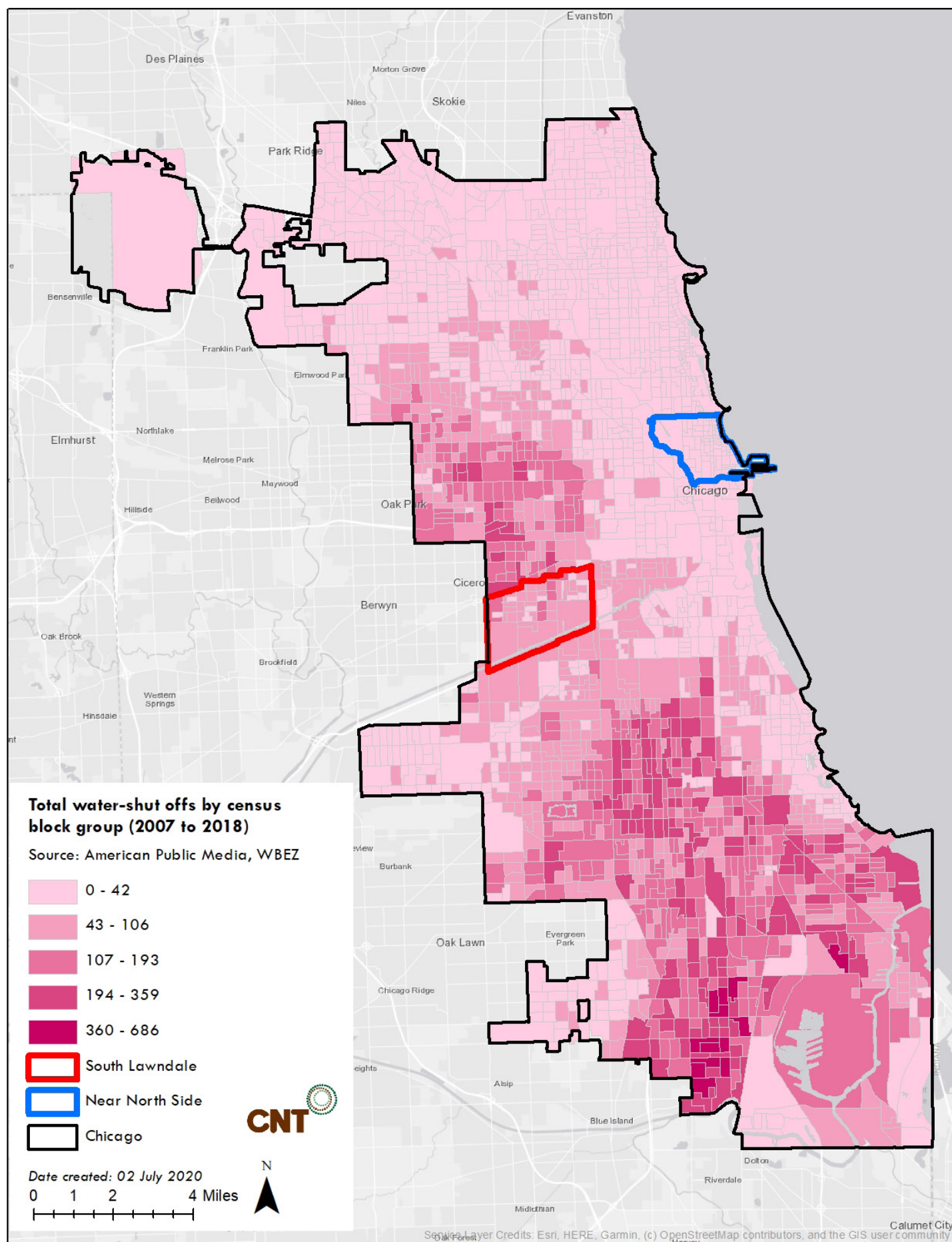
5. Chicago should suspend the new hydrant permit requirements, grant permits, and restore immediate water services to Chicago community gardens.

The changes in permitting requirements at the beginning of 2020 have increased costs for community gardens beyond what is feasible and have impacted their growing season. The cost of inspections, permits, and equipment for access to water have created barriers for community members to keep their gardens afloat. Community gardens should be invested in and supported as they not only provide societal benefits such as food access and healthy communities, but also promote the usage of green space and increase potential to aid in urban flooding reduction. This need for water access is particularly critical in light of the crucial function of community gardens in addressing food apartheid in Black and brown communities across Chicago, as well as expanded food insecurity due to COVID-19 and the resulting economic crises.

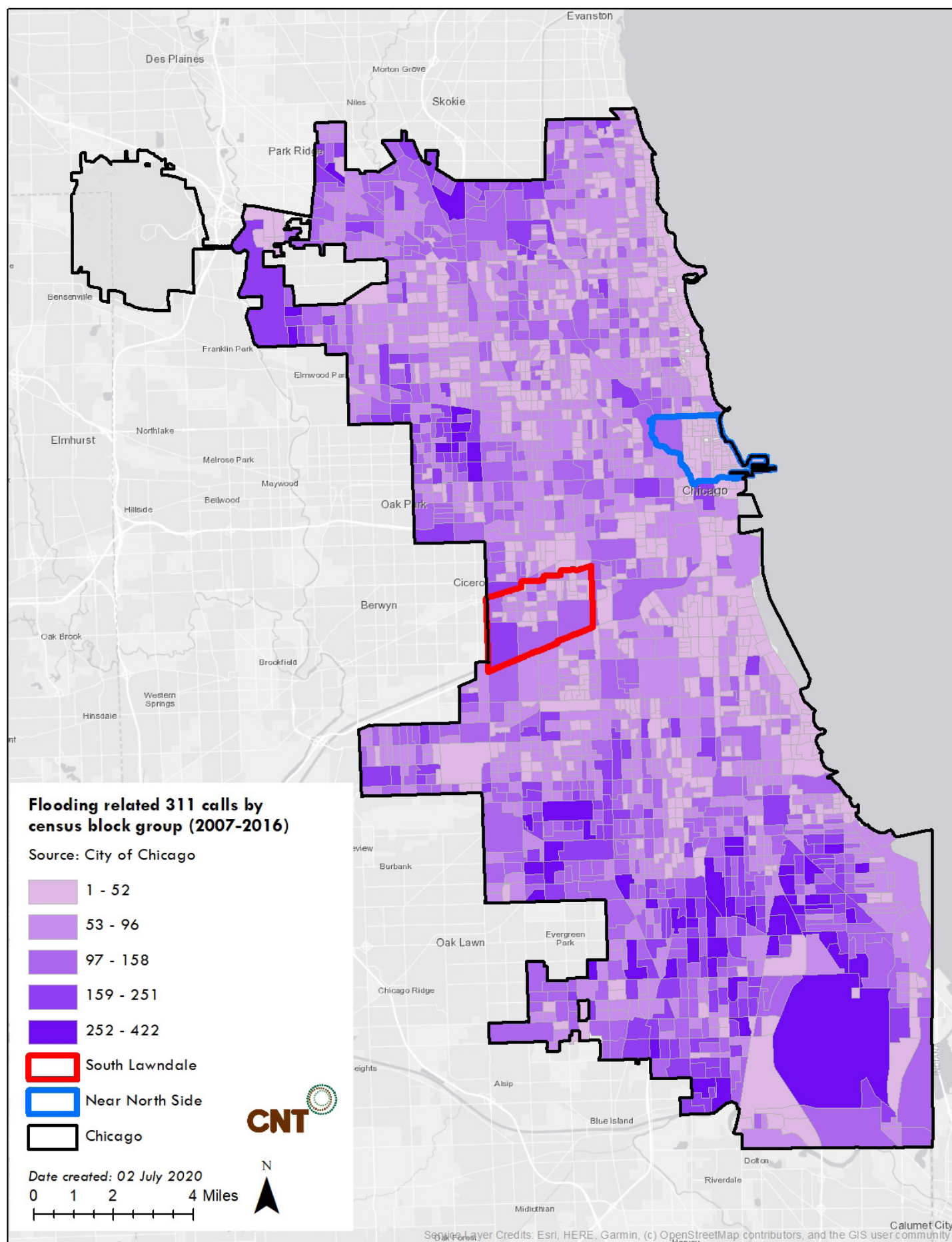
6. Provide living-wage, family-sustaining job opportunities and security to residents, along with healthy, affordable housing.

In the Little Village Industrial Corridor, there is an opportunity to reimagine and rebuild the corridor to support community-developed, sustainable-focused businesses that benefit the economic and physical health of the community. Additionally, to maintain the community's health, the city should work with community residents to mitigate gentrification and plan for clean, affordable housing so that residents can remain rooted in the community during the pandemic and future climate and social disasters.

Appendix A: Total Water Shut Offs by Census Block Group from 2007 -2018)



Appendix B: Flood Related 311 Calls by Census Block Group (2007-2016)



ⁱ Chicago Historical Society, “South Lawndale,” Encyclopedia of Chicago, 2005, <http://www.encyclopedia.chicagohistory.org/pages/1174.html>

ⁱⁱ “Corrections,” Cook County Sheriffs Office, 2018, <https://www.cookcountysheriff.org/cook-county-department-of-corrections/>

ⁱⁱⁱ Chicago Historical Society, “South Lawndale,” Encyclopedia of Chicago, 2005, <http://www.encyclopedia.chicagohistory.org/pages/1174.html>

^{iv} Department of Planning and Development, Department of Public Health, and Department of Transportation, “Mayor Emanuel’s Industrial Corridor Modernization: Little Vilalge Framework - Draft-For Public Comment” (Chicago, IL: City of Chicago, April 1, 2019), https://www.chicago.gov/content/dam/city/depts/zlup/Planning_and_Policy/Publications/draft-little-village-framework.pdf

^v Chicago Historical Society, “South Lawndale.”

^{vi} “Community Data Snapshot South Lawndale, Chicago Community Area” (Cook County, IL: Chicago Metropolitan Area Planning Agency, June 2020), <https://www.cmap.illinois.gov/documents/10180/126764/Near+North+Side.pdf>

^{vii} Department of Planning and Development, Department of Public Health, and Department of Transportation, “Mayor Emanuel’s Industrial Corridor Modernization: Little Vilalge Framework - Draft-For Public Comment.”

^{viii} “Community Data Snapshot Near North Side, Chicago Community Area” (Cook County, IL: Chicago Metropolitan Area Planning Agency, June 2020), <https://www.cmap.illinois.gov/documents/10180/126764/Near+North+Side.pdf>

^{ix} LVEJO Outreach Organizer, Edith Tovar, April-August 2020, Unpublished.

^x U.S. Environmental Protection Agency, “Envirofacts Home,” United State Environmental Protection Agency, 2019, <https://enviro.epa.gov/>

^{xi} US EPA, “Research on Near Roadway and Other Near Source Air Pollution,” Overviews and Factsheets, US Environmental Protection Agency, July 16, 2014, <https://www.epa.gov/air-research/research-near-roadway-and-other-near-source-air-pollution>

^{xii} Julie Wernau, “Fisk, Crawford Coal Plants Had Long History, as Did Battle to Close Them,” Chicagotribune.Com, September 2, 2012, <https://www.chicagotribune.com/business/ct-xpm-2012-09-02-ct-biz-0902-crawford-fisk-20120902-story.html>

^{xiii} Sophie Sherry, “Little Village Leaders Demand City Strip Tax Subsidies from Company That Botched Demolition of Power Plant Smokestack,” *Chicago Tribune.Com*, April 16, 2020, sec. Breaking News, News, <https://www.chicagotribune.com/news/breaking/ct-little-village-coal-plant-demolition-20200416-u4cdv43p-4zampbo2pte24bzt4-story.html>

^{xiv} Patty Wetli, “Hilco Issues Apology for Demolition Gone Awry, Neighbors Demand Prosecution,” *WTTW News*, April 14, 2020, sec. Business, <https://news.wttw.com/2020/04/14/hilco-issues-apology-demolition-gone-awry-neighbors-demand-prosecution>

^{xv} Xiao Wu et al., “Air Pollution Linked with Higher COVID-19 Death Rates,” *News*, April 7, 2020, <https://www.hsph.harvard.edu/news/hsph-in-the-news/air-pollution-linked-with-higher-covid-19-death-rates/>

^{xvi} Fran Spielman, “Lightfoot Orders End to Water Shut-Offs; Calls Them ‘a Heartless Act,’” *Chicago Sun-Times*, May 17, 2019, <https://chicago.suntimes.com/city-hall/2019/5/17/18629758/lori-lightfoot-transition-report-water-shut-offs-housing>

^{xvii} Department of Finance, “Utility Billing Relief FAQ,” City of Chicago, 2020, https://chicago.docugateway.com/main/guest/billing_relief/faqs/

^{xviii} Carla Stanke et al., “The Effects of Flooding on Mental Health: Outcomes and Recommendations from a Review of the Literature,” *PLoS Currents* 4 (May 30, 2012), <https://doi.org/10.1371/4f9f1fa9c3cae>

^{xix} Stanke et al.

^{xx} Institute of Medicine (US) Committee on Damp Indoor Spaces and Health, *Damp Indoor Spaces and Health* (Washington (DC): National Academies Press (US), 2004), <http://www.ncbi.nlm.nih.gov/books/NBK215643/>

^{xxi} Office of Water, “Urbanization and Storm Water Runoff,” Overviews and Factsheets, US Environmental Protection Agency, January 27, 2020, <https://www.epa.gov/sourcewaterprotection/urbanization-and-storm-water-runoff>

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