

With individuals spending most of their time at home, housing conditions play a major role in people's physical and mental health [1]. Homes for All St. Louis convened renters from both North and South City in February 2018 to discuss the lack of safe and quality rental housing in St. Louis and the consequences on the community's health and safety.

When asked the question 'What is your experience in your neighborhood?" participants spoke of sewage in basements, insect and rodent infestations, moldy walls that made their children sick, and faceless landlords who failed to help them with problems in their homes. The residents we spoke to understood that they were only a part of a larger intricately woven fabric of housing in St. Louis, a fabric that is in need of mending. This report is a crucial next step in understanding and implementing solutions to address the housing quality concerns residents identified.

The purpose of this research is to share and contextualize residents' stories alongside health and housing quality data in St. Louis, and present solutions that City stakeholders can pursue to ensure a healthier St. Louis. Through a collaborative research effort, Homes for All St. Louis, Human Impact Partners, The Vacancy Collaborative, and the City of St. Louis conducted a geospatial analysis of sociodemographic factors, housing quality indicators and health outcomes for 29 residential zip codes in St. Louis.

Findings underscore that the housing crisis in St. Louis is deeply linked to racial housing and health inequities, and that home truly is where health is:

- Housing code violations are concentrated in neighborhoods with negative health outcomes and among majority Black neighborhoods, in North St. Louis City and Southeast St. Louis City
- Residents' complaints of interior housing problems focused on mold, pests, plumbing, and lead — which can lead to health issues such as respiratory diseases, lead poisoning, and developmental delays in children
- Neighborhoods with worse housing quality conditions experience a five-fold greater ER visit rate for asthma and chronic lower respiratory disease
- Zip codes with greater housing code violations experience nearly 14 times greater rate of elevated blood levels in young children

There are a number of administrative and legislative actions the City of St. Louis can take to address this crisis. The St. Louis Building Division and Department of Health can notify tenants of open housing code

violations on the property, collaborate with community-based organizations to provide residents with additional social and financial resources, and expand the role of Emergency Inspectors to include pests and rodents. Simultaneously, the Board of Aldermen can enact policies that address mold in the building codes, codify anti-retaliation, require routine rental inspections, and offer tenant relocation assistance.

Racial and economic inequities are **root** causes of housing and health crisis in St. Louis

The connection between housing and health is well-established in research. Poor housing conditions include insufficient heating, cooling, and plumbing; the presence of lead, mold, or asbestos; lack of smoke alarms and carbon monoxide detectors; and structural inadequacies (e.g. older buildings with greater maintenance demands and less weatherization) [2]. Nationwide, substandard housing conditions have been linked to elevated blood lead levels, asthma, chronic lower respiratory disease, and other poor health outcomes, with disproportionate impacts to Black communities, especially young children [3-7]. Additional housing conditions (including affordability and stability) also produce racial inequities and negatively impact health, including poor sleep quality, and mental and physical health [8-10].

These racial inequities are in large part due to a long history of racial segregation, nationally and regionally, including housing policies such as redlining that overtly discriminated against Black residents and incentivized White residents to move into suburban areas. Policies like redlining had deep and far-reaching effects on the economic landscape in the U.S., leading to fewer financial institutions, reduced financial investment, and lower home values in majority Black neighborhoods. While intentionally discriminatory policies are now illegal, their effects are long lasting, and discrimination itself continues today - for instance in rental or mortgage applications and loan terms. According to St. Louis Affordable Housing Report Card (2018), Black applicants are three times as likely to be denied a home mortgage loan with home purchase loans nearly absent in North City. This systemic racism has isolated Black residents and deprived them of socioeconomic opportunities their White counterparts were afforded.

A number of reports highlight how a history of systemic racism has impacted the overall well-being of Black residents in St. Louis. For the Sake of All (2015) found that Black residents have higher mortality rates, premature deaths, and negative health outcomes like cancer [11]. These findings are concentrated in majority-minority census tracts in North City and pockets of Southeast City. The Environmental Racism Report (2019) demonstrated that Black City residents face greater environmental risks that contribute to stark racial disparities in health, wealth, and quality of life burdens [12]. The Equity Indicators (2018) dashboard shows that Black children are ten times more likely to visit the emergency room due to asthma complications and twice as likely to test positive for elevated blood lead levels than their White counterparts [13].

St. Louis City has a long and ongoing history of racial segregation, enacted through policies and practices across various levels and sectors of government. As a result, Black families have been systematically excluded from opportunities that would advance both prosperity and their health [12,14-15]. Because Black families' lack of access to safe and quality housing is a critical part of this problem, housing policy represents an opportunity to repair harm and build toward a more just future.



Finding: Resident-reported housing complaints like lead, mold, and pests and associated health impacts are concentrated in predominantly Black and low-income neighborhoods

When a resident needs to report a housing quality issue in St. Louis City, they contact the Citizen's Service Bureau (CSB). This City agency is responsible for receiving and routing resident requests for services to the relevant City department. Requests related to housing are routed to either the Building Division or the Department of Health. See Appendix for a description of methodology.

Between January and December 2022, City residents filed 4454 total CSB requests. Almost half (46%) of requests were related to exterior conditions of a housing unit followed by:

- Interior conditions (12%)
- Plumbing and sewage (10%)
- · Pests and infestation (8%)
- Lead (5%)
- Mold (5%)

Nearly one in five (18%) housing quality complaints were due to lead, mold, or pests — exposures that can lead to serious health issues. including lead poisoning and respiratory conditions. The zip codes with the most CSB requests were 63116 (12%), 63118 (11%), and 63111 (10%). These include Ward 1,3,7,8 and 6 are among the most densely populated areas in the City.

Key consideration: Fear of retaliation or displacement may result in underreporting of housing and safety concerns; therefore, it is likely that the actual magnitude of resident-reported complaints and violations is greater that what is reported to the city.

The average CSB request rate (adjusted for number of total occupied housing unit by zip code) was 22 per 1000 housing units. Residents of St. Louis zip codes that file requests to CSB at higher than the average rate have a greater proportion of households who are: Black or African American, economically vulnerable (i.e. lower median household income, below poverty level, greater rent cost burden), and experience a disability.

Residents in these zip codes also have worse health outcomes across all health indicators, such as ER visits for asthma or chronic lower respiratory disease, elevated child blood lead levels, and insufficient sleep. Houses in these zip codes also have a greater rate of HCD violations (compared to zip codes beneath the average CSB file rates). See Table 2 in Appendix for cross-tabulations of CSB filing rate, sociodemographic factors, and health outcomes.

This correlation between race, economic status, health, and housing is also reflected when focusing more specifically on CSB request rates for lead, mold, and pests — which are disproportionately higher for low-income and Black zip codes (see Table 3 in Appendix). For example, zip codes with higher than average CSB requests for lead, mold, and pests experienced ER asthma visit rate than zip codes lower than the average. Similarly, outcomes for chronic lower respiratory disease and elevated blood lead levels were five-fold and four-fold respectively, for zip codes with higher numbers for CSB reports of these environmental triggers

Key Takeaway: Zip code 63120 (Ward 13) has the highest rate of CSB requests due to lead, mold, and pest infestation per housing unit and it also has the highest ER visitation rate for asthma. This zip code is 96% Black/African American, where 36% of households live below the poverty and 34% report fair or poor health.

According to the U.S. Census Bureau, St. Louis zip codes with a greater than average number of households lacking plumbing facilities also have a greater proportion of households who are Black, below poverty level, and residents with disability. These zip codes experience worse health outcomes across all health indictors, including ER visits for asthma and chronic lower respiratory disease, which can be triggered by exposure to mold as a result of plumbing leaks.

Key Takeaway: Zip codes (Ward 12,13,14) are the most impacted by lack of plumbing facilities according to the U.S. Census. Again, this zip code is majority Black/African American (92%) and consistently has worse than average housing quality on several housing quality indicators. This zip code is also where 28% of residents report disability—more than any other zip code in St. Louis.

Finding: City records of housing code violations are also disproportionately concentrated in Black and economically vulnerable neighborhoods, alongside the worst child lead poisoning rates and other health impacts.

Standards for residential occupancy in the City of St. Louis are governed by the Housing Conservation Program, which establishes minimum interior condition requirements including occupancy limits, and minimum exterior conditions as set by the International Property Maintenance Code. Building code violations for occupied residential properties are considered Housing Conservation District (HCD) violations [15-16]. Inspections can be triggered when either (a) a homeowner wishes to obtain a certificate of inspection, (b) there is a change of renter, or (c) a resident complaint or request is received.

The average HCD violation rate in St. Louis was 283 per 1000 housing units. Zip codes with a greater than average HCD violation rate have a greater proportion of households who are Black or African American and economically vulnerable (i.e. living below poverty line, lower median household income, greater rent cost burden). They also experience worse health outcomes across all indicators, including a nearly 14 times greater rate of elevated blood lead levels in young children as well as nearly five times the ER visitation rate for chronic lower respiratory disease. According to the U.S. Census Bureau, these homes are older, and are more likely to lack adequate plumbing and kitchen facilities compared to zip codes with fewer HCD violations (see Table 4 in Appendix).

Key takeaway: Zip code 63118 (Wards 1, 7 and 8) has the highest number of HCD violations and the leading rate of elevated child blood lead levels. It has more homes built before 1940 than any other zip code in St. Louis. This zip code is racially reflective of St. Louis with 45% of residents identifying as Black or African American.

Findings: Maps



Data analysis of CSB requests and HCD violations conclusively shows that St. Louis zip codes with the poorest housing conditions are disproportionately concentrated in Black and low income communities with historical disinvestment. Residents in these zip codes have worse housing quality conditions and also experience worse health outcomes — resulting in racial, economic, and health inequities in St. Louis. This further supports the reality of racial inequities and racial segregation in St. Louis.

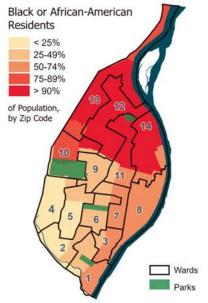


Figure 1: Percentage of Black or African-American population by zip code and ward in St. Louis, Missouri

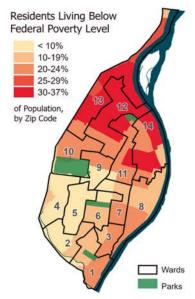


Figure 2: Percentage of population living below the federal poverty level by zip code and ward in St. Louis, Missouri

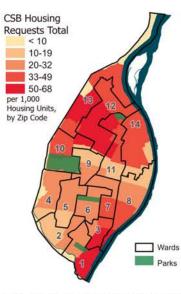


Figure 3: Rate of Citizens' Service Bureau (CSB) requests for service related to housing conditions for occupied housing units, by zip code and ward in St. Louis, Missouri

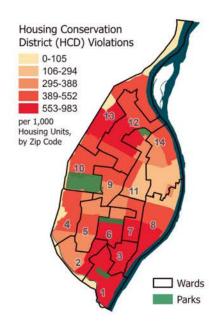


Figure 4: Rate of Housing Conservation District (HCD) violations for occupied housing units by zip code and ward in St. Louis, Missouri

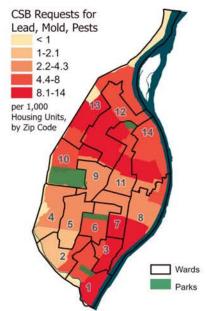


Figure 5: Rate of Citizens' Service Bureau (CSB) requests for service related to lead, mold, and pests for occupied housing units, by zip code and ward in St. Louis, Missouri

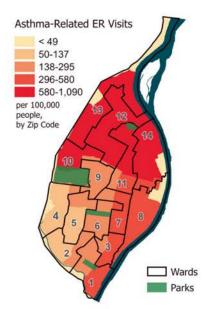


Figure 6: Rate of emergency room (ER) visits due to asthma per 100,000 residents by zip code and ward in St. Louis, Missouri

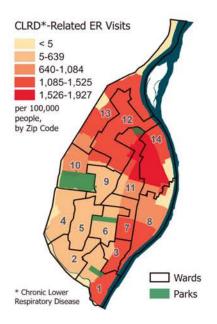


Figure 7: Rate of emergency room (ER) visits due to chronic lower respiratory disease (CLRD) per 100,000 residents by zip code and ward in St. Louis, Missouri

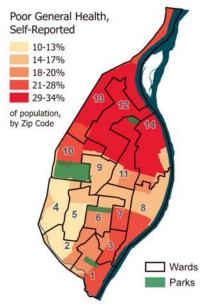


Figure 8: Percentage of residents who selfreported having poor or fair general health, by zip code and ward in St. Louis, Missouri

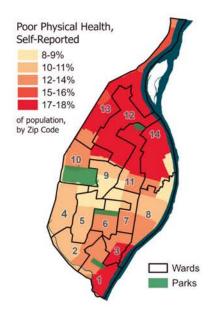


Figure 9: Percentage of residents who selfreported having poor physical health, by zip code and ward in St. Louis, Missouri

WHERE WE LIVE IS

AT THE CORE OF OUR DAILY LIVES

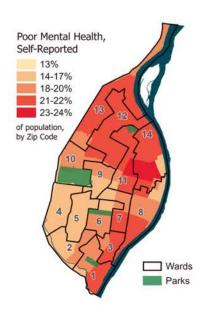


Figure 10: Percentage of residents who selfreported having poor mental health, by zip code and ward in St. Louis, Missouri

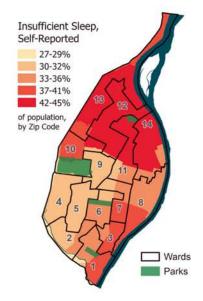


Figure 11: Percentage of residents who report insufficient sleep, by zip code and ward in St. Louis, Missouri

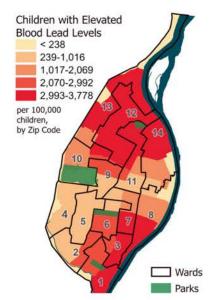


Figure 12: Rate of elevated blood lead levels (BLL) at 3.5 μg/d and above per 100,000 children aged 0-9, by zip code and ward in St. Louis, Missouri

The City of St. Louis must continue to monitor and address housing and health conditions and partner with impacted communities to eliminate racial inequities. Best practices in community engagement include decision-makers sharing power with ALL stakeholders. The power to draft, implement, and evaluate policy solutions must be shared with our community members who are experiencing vulnerable housing and health conditions.

A diverse stakeholder group made up of St. Louis City agencies, residents, nonprofits and local institutions collaborated in 2023 to research and craft a set of solutions to improve housing quality. We propose the following administrative and policy solutions to address the housing and health inequities in St. Louis City.

Administrative Solutions

The St. Louis Building Division and Department of Health should implement the following solutions:

- Send a copy of the inspection notice of violation to the tenant(s). After an inspection is conducted and a violation has been identified by the inspector, a hard copy Notice of Violation is only sent to the owner of the property. This leaves the tenant out of the loop and unaware of any open HCD violations on the property. The only time a tenant is aware of potential physical or health risks of the property is when a condemned notice is placed on the front door. Sending a copy of the Notice of Violation to tenants informs them of potential physical and or health risks that impact them, allowing them to take the necessary precautions.
- Collaborate with community-base organizations. Data shows
 that residents living in homes with open HCD violations are more
 likely to experience a rental housing cost burden as well as other
 social and economic pressures. Collaborations with communitybased organizations can provide residents with additional social
 and financial resources, create renter-specific communication
 materials, and support residents by walking them through the
 code enforcement process.
- Expand the role of Emergency Inspectors. Currently, Emergency Inspectors work outside the typical 8 to 5 schedule only for fires or other emergency situations. Since infestation is a top complaint, it should be included in the definition of emergencies that emergency inspectors should investigate. Infestation is an emergency. Many pests are not active during the standard 8 5 workday of Environmental Health Officers. Including pest complaints with emergency investigations will allow for timely confirmation of pest infestation as well as address the harms experienced by residents and create a more accurate understanding of the frequency of pest/infestation code violations.

Conclusion

Policy Solutions

The City of St. Louis' Board of Aldermen should adopt these four policies:

- Explicitly address mold in building codes. Mold can trigger asthma and cause and exacerbate respiratory diseases. Currently, mold is not mentioned in state, county, or city ordinances, so tests cannot be required and owners cannot be held accountable for mold mitigation. Regulating mold has precedent in other places. In Massachusetts, sanitary code defines chronic dampness and makes owners responsible for maintaining the dwelling so that they exclude wind, rain and snow and are free of chronic dampness (moisture, water, mold, fungi) [17]. San Francisco's housing code designated mold as a substandard housing condition. The City should use these examples to create and adopt a city policy [18].
- Include an anti-retaliation statute in renter-related ordinances. To encourage renters to report housing quality conditions and prevent harassment and unjust evictions, the City should add anti-retaliatory language to current ordinances. The language must clearly note a tenant's right to file a complaint about housing conditions that pose a physical or health risk. In California, state law does not limit the definition of retaliation, but includes threats, rent increases, and decreased or deferred maintenance [19]. Additionally, in Virginia, state law allows lease

termination where mold is not remediated. The City should use

these examples to create and adopt a city policy [20].

- Perform proactive (regular and routine) rental inspections. To assess the full scope of conditions in the City's rental housing stock, the St. Louis Building Division should conduct regular and routine rental inspections as a part of the current occupancy permit process. The policy for occupancy permits needs to be amended by the City of St. Louis' Board of Aldermen for regular and routine rental inspections to take place. Currently, inspections only take place during a change in occupancy or resident complaint via the Citizen Service Bureau. In 2022, Change Lab Solutions compiled a comprehensive guide for proactive rental inspections and found that proactive inspections serve as a preventive approach to much more daunting code violations [21].
- Relocation Assistance. When a property is condemned or found to be uninhabitable by the City of St. Louis, no resources are currently provided to the tenant. Both Portland and the City of Los Angeles provide financial resources to tenants to relocate and/or cease payment to the landlord once a health threatening code violation is confirmed [22-24]. Because the financial burden is no longer on the tenant, these resources allow the tenant to put energy and resources into finding a safe home. The City should use the examples from Portland and Los Angeles to create and adopt a policy for the City of St. Louis.

Our research further supports that housing quality is inextricably linked to racial segregation and the health outcomes of residential housing occupants. Because the data shows that Black communities are disproportionately impacted by this problem, the City of St. Louis must continue to track the racial impact of the code enforcement system and partner with these communities to eliminate these inequalities. The City of St. Louis must develop systems for more accurate data and reporting, so that policy outcomes can be tracked. The recommendations offered are feasible first steps to reducing negative health outcomes, improving housing quality and preventing displacement in impacted communities across the City. Enacting the recommendations is a way to demonstrate an acknowledgement and rectification of our City's racialized past, with a forward commitment to the health and well-being of its residents. The coalition that created this report will continue to push for healthy housing in St. Louis, by sharing a comprehensive report that includes process maps of the Buildings Division and the Department of Health's code enforcement process, a scan of the housing quality resource ecosystem, best practices for code enforcement, and additional short and long-term recommendations. Homes For All St. Louis will lead advocacy on the recommendations while as a coalition both municipal and participating stakeholders will collaborate to implement the recommendations.



Methodology

We conducted a zip code level analysis — as the unit smallest available — to explore relationships between housing and health in St. Louis. We selected sociodemographic factors that are linked to housing and health outcomes and those relevant as priorities for our stakeholders for intervention purposes. We retrieved local City data on housing quality that could provide detailed information on housing quality and safety issues such as infrastructure, lead, mold, and pests which are known to impact health. We selected health outcomes that are typically associated with housing quality exposure, as well as general health measures available by zip code.

Refer to this link [https://tinyurl.com/nher63yb] for additional tables and figures referenced in this research brief:

Table 1: Data and Data sources

Table 4: Zip-code level socio-demographic, housing, and health inequities according to Housing Conservation District (HCD) violations in St. Louis Figure 14: St. Louis zip codes part of the research analysis in St. Louis

Table 2: Zip-code level socio-demographic, housing, and health inequities according to Citizens' Service Bureau (CSB) requests in St. Louis

	Zip codes with less than 21.76 CSB requests per 1000 housing units	Zip codes with greater than or equal to 21.76 CSB requests per 1000 housing units	
Sociodemographic factors (as av	verages in zip codes)	***	
Black or African American (%)	41%	56%	
Below poverty level (%)	18%	21%	
Median household income (\$)	\$58,373	\$43,124	
Under 5 years (%)	6%	6%	
65 years and over (%)	14%	14%	
With a disability (%)	14%	17%	
Health outcomes (as averages in	zip codes)	100	
Chronic lower respiratory disease ER visit rate per 100,000 population		202.6	1167.81
Asthma ER visit rate per 100,000 population		87.4	578.9
Blood lead levels 3.5 $\mu g/dL$ and higher per 100,000 children age 0-9		424.35	2622.36
Insufficient sleep (%)		34%	39%
Poor physical health (%)		11%	15%
Self-rated health as poor or fair (%)		18%	26%
Poor mental health (%)		17%	20%
Housing indicators (as averages	in zip codes)		
HCD violations per 1000 units		106.4	499.97

Table 3: Zip-code level socio-demographic, housing, and health inequities according to lead, mold, pest related CSB requests in St. Louis

	Zip codes with less than 4.187 mold, lead, pest CSB requests per 1000 housing units	Zip codes with greater than or equal to 4.187 mold, lead, pest CSB requests per 1000 housing units	
Sociodemographic factors (as av	erages in zip codes)		
Black or African American (%)	34%	71%	
Below poverty level (%)	16%	26%	
Median household income (\$)	61,642	37,794	
Under 5 years (%)	6%	6%	
65 years and over (%)	14%	15%	
With a disability (%)	13%	19%	
Health outcomes (as averages in	zip codes)		
Chronic lower respiratory disease ER visit rate per 100,000 population		292.7	1195.91
Asthma ER visit rate per 100,000 population		113.5	625.6
Blood lead levels 3.5 μg/dL and higher per 100,000 children age 0-9		538.34	2835.46
Insufficient sleep (%)		33%	41%
Poor physical health (%)		11%	16%
Self-rated health as poor or fair (%)		18%	28%
Poor mental health (%)		17%	21%
Housing indicators (as averages i	n zip codes)		
HCD violations per 1000 housing units		146.4	505.58

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- Yau, N. How Much More Time We Spent at Home. FlowingData. Accessed February 9, 2024. https://flowingdata.com/2021/09/03/everything-more-from-home/
- 2.U.S. Department of Health and Human Services: Office of Disease Prevention and Health Promotion. Quality of Housing. Healthy People 2030. Accessed February 9, 2024. https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/quality-housing
- Bryant-Stephens, T.C., et al. Housing and Asthma Disparities. J Allergy Clin Immunol. Nov. 2021; 148(5):1121-1129. Accessed February 9, 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9809049/
- 4. Howard, A., et al. Housing Typologies and Asthma: A Scoping Review. BMC Public Health 23. Sept. 2023; 1766 (2023). Accessed February 9, 2024. https://doi.org/10.1186/s12889-023-16594-8
- 5. Wilson, N.J., et al. Using Exterior Housing Conditions to Predict Elevated Pediatric Blood Lead Levels. Environ Res. Feb. 2023; 1;218:114944. Accessed February 9, 2024. https://doi.org/10.1016/j.envres.2022.114944
- 6.Fletcher, J.M., et al. Long Term Effects of Childhood Asthma on Adult Health. Journal of Health Economics. May 2010; 29(3):377-387. Accessed February 9, 2024. https://doi.org/10.1016/j.jhealeco.2010.03.007
- 7. Harari, F., et al. Blood Lead Levels and Decreased Kidney Function in a Population-Based Cohort. American Journal of Kidney Diseases. Sept. 2018; 72(3): 381-389. Accessed February 9, 2024. https://doi.org/10.1053/j.ajkd.2018.02.358
- 8. Jackson, C.L. Housing Conditions as Environmental and Social Determinants of Sleep Health. The Social Epidemiology of Sleep. Nov. 2019; Chapter 14: 373-408. Accessed February 9, 2024. https://doi.org/10.1093/oso/9780190930448.003.0014
- 9. Evans, G.W., et al. Housing Quality and Mental Health. J Consult Clin Psychol. June 2000; 68(3):526-530. Accessed February 9, 2024. https://doi.org/10.1037/0022-006X.68.3.526
- 10. Washington University in St. Louis and Saint Louis University. For the Sake of All: A report on the health and well-being of African Americans in St. Louis and why it matters for everyone. FSOA Report. July 2015. Accessed February 9, 2024. https://bpb-us-w2.wpmucdn.com/sites.wustl.edu/dist/3/1454/files/2018/06/FSOA_report_2-17zd1xm.pdf
- 11.Washington University School of Law Interdisciplinary Environmental Clinic. Environmental Racism in St. Louis. June 2023. Accessed February 9, 2024. https://www.environmentalracismstl.com/; and https://www.archcitydefenders.org/wp-content/uploads/2022/10/2019_ACD_EnvironmentalRacisminSTL_Report-1-1.pdf
- 12. City of St. Louis, MO, Forward Through Ferguson, and United Way of Greater St. Louis. Equity Indicators: Toward a St. Louis Region that Works for us All. Baseline Report. 2018. Accessed February 9, 2024. https://www.stlouismo.gov/government/departments/mayor/initiatives/resilience/equity/docu
- ments/upload/Equity-Indicators-Baseline-2018-Report-Document.pdf
 13. Gordon, C. and Bruch, S.K. Home Inequity: Race, Wealth, and Housing in
- St. Louis since 1940. Housing Studies. Sept. 2019; 35(7):1285-1308. Accessed February 9, 2024. https://doi.org/10.1080/02673037.2019.1657073
- 14. City of St. Louis, MO Citizens' Service Bureau. Report a Problem with a City Service: Guidelines for submitting complaints and requests for services. 2011-2024. Accessed February 9, 2024. https://www.stlouis-mo.gov/government/departments/public-safety/neighborhood-stabilization-office/citizens-service-bureau/How-to-file-a-service-request.cfm#:~text=The%20Citizens%27%20Service%20Bureau%20(CSB, correct%20City%20services%20or%20programs.

- 15. Cambria N., et al. Segregation in St. Louis: Dismantling the Divide. 2018. Accessed February 9, 2024. https://bpb-us-w2.wpmucdn.com/sites.wustl.edu/dist/3/1454/files/2018/06/Segregation-in-St.-Louis-Dismantling-the-Divide-22ih4vw.pdf
- City of St. Louis, MO. Ordinance 69202. 2012. Accessed February 9, 2024. https://www.stlouis-mo.gov/government/city-laws/ordinances/ordinance.cfm? ord=69202
- 17. Massachusetts Department of Public Health. 105 CMR 410.000: Minimum Standards of Fitness for Human Habitation (State Sanitary Code, Chapter II). Accessed February 9, 2024. https://www.mass.gov/doc/105-cmr-410-minimum-standards-of-fitness-for-human-habitation-state-sanitary-code-chapter-ii/download
- City of San Francisco, CA. San Francisco Health Code Article 11: Nuisances.
 Accessed February 9, 2024.
 https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_health/0-0-0-1890
- 19.State of California. California Code, Civil Code CIV § 1942.5. Jan. 2023. Accessed February 9, 2024. https://codes.findlaw.com/ca/civil-code/civ-sect-1942-5.html
- 20 .State of Virginia. Code of Virginia § 55.1-1231 Relocation of tenant where mold remediation needs to be performed in the dwelling unit. Accessed February 9, 2024.
- https://law.lis.virginia.gov/vacode/title55.1/chapter12/section55.1-1231/
 21. ChangeLab Solutions. A guide to Proactive Rental Inspections. 2022.
 Accessed February 9, 2024.

 $https://www.changelabsolutions.org/sites/default/files/2022-11/A-Guide-to-Proactive-Rental-Inspections_FINAL_20221031A.pdf$

- 22. City of Portland, OR. Ordinance No. 187380 and amendments 30.01.085 Portland Renter Additional Protections. March 2018. Accessed February 9, 2024. https://www.portland.gov/phb/rental-services/documents/ordinance-189421-relocation-assistance/download
- 23. The Tenants Law Firm. What is the Rent Escrow Account Program (REAP)?

 July 2023. Accessed February 9, 2024.

 https://www.tenantslawfirm.com/blog/what-is-the-rent-escrow-account-program-
- reapnbsp#:~:text=The%20Rent%20Escrow%20Account%20Program%2C%20a lso%20called%20REAP%2C%20is%20a,in%20Los%20Angeles%20rental%20p roperties.
- 24. City of Los Angeles, CA. Los Angeles Municipal Code Ordinance No. 173,810 Sec. 162.03 Referral to REAP. March 2001. Accessed February 9, 2024. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-197482#JD_162.03.

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