

POLICIES, PROGRAMS AND PRACTICES IN ASTHMA AND LEAD

Strategies for Progress

Prepared for the National League of Cities by The George Washington University School of Public Health



Advancing City-Level Healthy Housing

POLICIES, PROGRAMS AND PRACTICES
IN ASTHMA AND LEAD
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About the National League of Cities

The National League of Cities (NLC) is the nation's leading advocacy organization devoted to strengthening and promoting cities as centers of opportunity, leadership, and governance. Through its membership and partnerships with state municipal leagues, NLC serves as a resource and advocate for more than 19,000 cities and towns and more than 218 million Americans. NLC's Institute for Youth, Education, and Families (YEF Institute) helps municipal leaders take action on behalf of the children, youth, and families in their communities. NLC launched the YEF Institute in January 2000 in recognition of the unique and influential roles that mayors, city councilmembers and other local leaders play in strengthening families and improving outcomes for children and youth.

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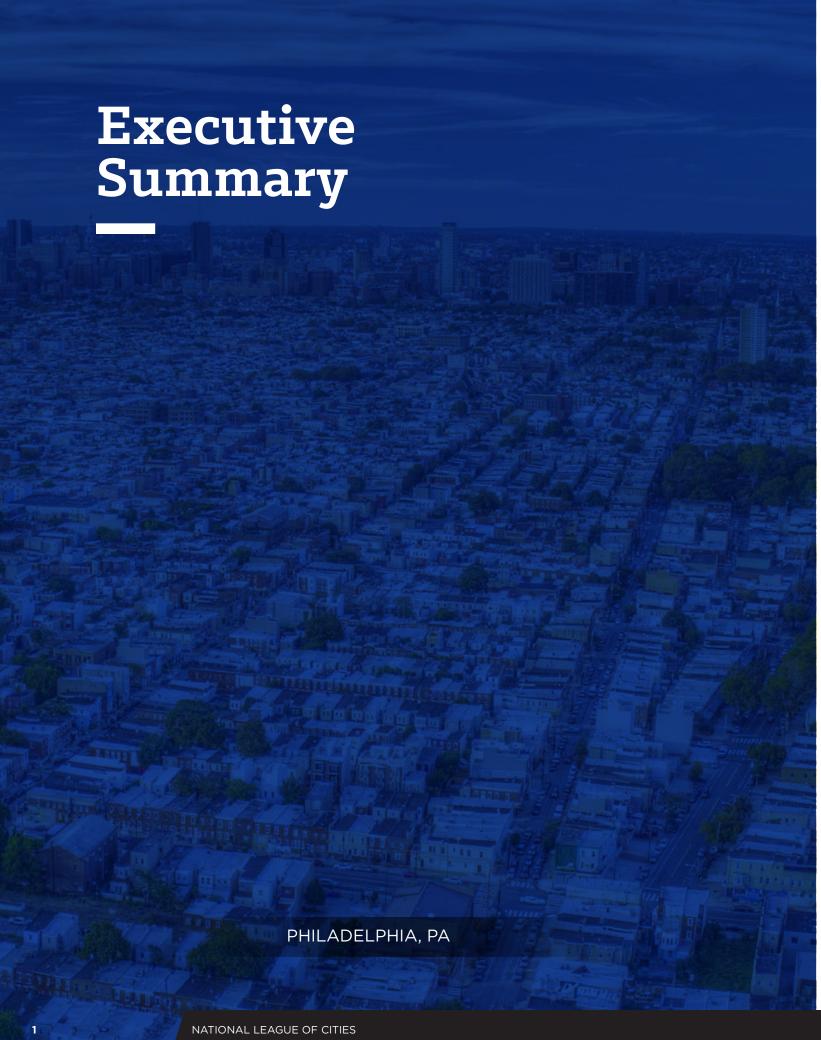
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Cities across the country face housing stock riddled with lead and asthma hazards. One in three US homes has lead paint;¹ nearly half of all US homes have elevated levels of at least three asthma-related allergens.² These unhealthy housing conditions in rental units are making residents sick.

The World Health Organization notes younger children "are particularly vulnerable to the toxic effects of lead and can suffer profound and permanent adverse health effects, particularly affecting the development of the brain and nervous system." Meanwhile, asthma is the most common chronic illness among children in the United States and is one of the leading causes of school absenteeism. Without proper treatment, lead poisoning and asthma can both be fatal.

In recognition of this reality, many cities have implemented programs, policies and practices aimed at addressing asthma and lead triggers in private rental housing in their jurisdictions. In a literature review used to inform this report, researchers identified 55 cities that have taken steps to address healthy housing in their jurisdictions across a wide variety of strategies. This report reviews nine of those cities and strategies including:

- Rental licensing and inspection ordinances in:
- + Boston, MA
- + Brooklyn Center, MN
- + Cleveland, OH
- + Detroit, MI
- + Los Angeles, CA
- + Rochester, NY
- + Toledo, OH
- The Breathe Easy at Home program in Boston, MA

- The Kresge Foundation's Advancing Safe and Healthy Housing Initiative in Greensboro, NC
- The Lead Court in Philadelphia, PA

Nevertheless, the vast scope of cities and the healthy housing programs, policies and practices they employ suggest further research in this area is not only warranted, but necessary to understand strategies city leaders are using to address healthy housing.

City Leadership and Approaches to Healthy Housing

City leadership is essential to addressing healthy housing and ensuring children and families reach their full potential and thrive. The underlying building codes on which healthy housing policies, programs and practices are based should reflect not only a concern for the health of physical infrastructure but also the health of inhabitants. City leaders must be deliberate in designing and/or amending building codes with a human health focus.

■ Proactive rental inspection: Proactive rental inspection requires landlords in a city to have their rental units inspected before receiving rental registration and the authority to lease their units. Under these systems, city leaders and stakeholders can identify and address potentially hazardous housing conditions before they negatively affect the health of tenants.

■ Targeted registration and inspection:

Targeted registration and inspection requires registration and inspection based on the type of occupant living in a rental unit, the age of the home, the location of the home, or the number of units in the building. Targeting units whose characteristics make them more likely to contain healthy housing hazards or whose occupants would suffer greater negative health consequences from these hazards allows city leaders to allocate limited resources more effectively.

■ Performance-based rental licensing:

A type of targeted rental licensing and inspection, performance-based rental licensing enables city officials to vary registration, and inspection requirements for rental units based on how well a landlord is able to abide by health and housing codes. Better-performing landlords have less burdensome requirements and enable city leaders to focus efforts and resources on units with greater hazards.

City leaders also use healthy housing policies, programs and practices beyond various rental registration and inspection strategies.

- Third-party violation reporting: Third-party violation reporting systems enable stakeholders, such as healthcare providers, to report potential code violations instead of vulnerable tenants who may fear retaliation from their landlords.
- Targeted arbitration systems: City-level targeted arbitration systems provide tenants with judicial systems specifically designed to deal with violations that affect healthy housing conditions.

■ Rent withholding mechanisms: Rent withholding mechanisms, namely city-run escrow accounts, provide renters an account into which they can pay their rent. This money is withheld from the landlord until healthy housing issues have been addressed.

Major Challenges

Interviews with city stakeholders in the profiled cities suggest that despite varied approaches to developing and implementing healthy housing programs, policies and practices, a number of challenges remain constant across cities.

- Landlord opposition: Many of the policies, programs and practices described in this report do not change housing or health code standards, but do hold landlords that violate these codes accountable. Between registration and inspection fees, mitigation and elimination costs, and fines, these policies, programs and practices can cost landlords, particularly lower-performing landlords, more money, creating resistance to these changes.
- also be resistant to allowing inspectors into their homes. City leaders must overcome tenant distrust of government workers as well as with concerns that landlords will raise rents if they are required by the city to address unhealthy housing conditions.

Depending on design, some rental inspection ordinances may even be subject to federal Constitutional challenges, particularly with respect to the Fourth (freedom from unreasonable search and seizure) and Fifth (freedom from self-incrimination)

Amendments of the US Constitution. Both tenants and landlords may decide to challenge rental inspection ordinances on such grounds.

- Political Climate: Political climate includes bureaucratic resistance to change or inertia from the city government as a whole. Agencies whose work stands to change or whose power will be modified may be resistant to healthy housing efforts, even when other municipal agencies are in favor of the implementation of new policies.
- Scope of City Authority: Policymakers must take into consideration the multiple layers of overlapping governmental jurisdictions city, county, state, and federal and the scope of their own authority to implement healthy housing policies, programs and practices.
- Limited financing: Lack of sustainable funding can jeopardize the future of city-level healthy housing initiatives when money runs out to fund these programs. Data about the positive effects of healthy housing initiatives can reinforce the idea that such initiatives must continue.

Key Strategies to Advance Healthy Housing Efforts

City leaders interviewed for this report discussed several key areas for city action that can help overcome challenges when developing and implementing healthy housing policies, programs and practices.

CONVENER AND COALITION BUILDING

City leaders can play a pivotal role in convening key stakeholders to tackle difficult issues and develop local action plans. Specific to healthy housing, the ability to connect key city agencies and leaders with health, community development, and other key stakeholders is critical in forging comprehensive efforts to address healthy housing issues. By convening and building effective coalitions, cities can better engage diverse stakeholders and cultivate champions such as healthcare providers, lawyers, judges, teachers and social workers who can advocate on behalf of tenants.

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COMMUNITY ORGANIZING

Community organizing and developing campaigns to advance policy goals is a fundamental step in realizing change.

Community organizing helps prioritize problems, engage residents, strengthen infrastructure and expand resources to facilitate change.

Grassroots efforts to mobilize tenants in their capacities as parents, workers and general members of society put a human face on lead hazards and asthma triggers. Members of the community are often particularly motivated to address healthy housing conditions because their homes and health are at stake.

FACILITATING ADOPTION

There must be sufficient transition time and administrative flexibility to facilitate the adoption of healthy housing policies, programs and practices. A shift in how rental units are regulated or code is enforced in a city requires patience and vigilance on the part of city policymakers. Landlords may not understand what is required of them immediately. Tenants may not understand what they should expect from their landlords and where they can turn if these expectations are not met. To meet this challenge, several cities profiled in this report with rental inspection ordinances employed a staggered implementation of these ordinances requiring that the highest risk areas come into compliance first, followed by lower risk areas. Other cities waived initial registration fees for rental units. These efforts promote a smooth and successful transition to new healthy housing policies, programs or practices.

SUSTAINABLE FUNDING

In developing healthy housing initiatives, cities should ensure licensing fees, penalties, funding from the city's general fund, and/or other revenue sources such as Medicaid can sustain the program moving forward. Many cities are reliant on Department of Housing and Urban Development (HUD) funding to

support healthy housing policies, programs and practices, but lack control over the magnitude and frequency of this funding.

A robust financing structure helps to ensure that a city's healthy housing policy, program or practice is not subject to modification due to changes in the municipal budget or loss of funding from an outside source.

PEER-TO-PEER GUIDANCE FROM OTHER CITIES

City leaders should consider reaching out to other jurisdictions directly for further peer-topeer support as there are lessons learned and models that can be better adapted to address healthy housing issues across municipalities. While there are publicly available peer-reviewed articles concerning the efficacy of healthy housing policies, programs and practices, they are not a substitute for the guidance city leaders receive through their relationships in other jurisdictions. City leaders also may consider convening conferences with multiple cities so that those interested in healthy housing policies, programs and practices can learn from each other. Further coordination across national partners to support peer-topeer convenings of city leaders is an essential element to longer-term success and scale.

EFFECTIVE USE OF DATA AND EVALUATION

City policymakers can use data to answer many different questions and address potential opposition while a policy is under development. How much changes could cost landlords, projections on improving health outcomes, and the direct and indirect cost savings associated with health improvements, are all potential areas of data collection city leaders could explore.

Evidence surrounding return on investment (ROI) is an especially important component of legitimizing healthy housing initiatives. Information on how these improvements

in health outcomes can reduce costs (e.g. fewer emergency room and hospital visits, less missed days of work/school) can help prioritize healthy housing initiatives.

Policies should also be evaluated on an ongoing basis. Jurisdictions considering new policies and approaches should build evaluations into their plans from the beginning to ensure adequate funding to support meaningful assessments. Cities may consider enlisting a data and evaluation partner such as a university or hospital.

As more data and evaluation becomes available, it will be important for researchers to help translate that evidence into language and formats that are easily understood by lawmakers and other stakeholders. One approach to translation would be building infrastructure to help cities disseminate model policies, programs and practices through online hubs. These hubs could include model ordinance language that cities could adapt for their own specific needs.

COMPELLING MESSAGING

Effectively engaging a diverse array of healthy housing stakeholders requires compelling messaging. It is important that city leaders are able to frame the debate around protecting the health of children (i.e. those most significantly

impacted by lead poisoning and asthma triggers) and other renters in rental units in cities. Community members such as parents, teachers, and other city residents responsible for taking care of children can be especially effective at framing messaging in support of healthy housing initiatives at the city level.

LEVERAGING MEDIA

City officials and their partners must effectively engage and use the media to educate the public about the issue of healthy housing and about the specific healthy housing policy, program or practice a city intends to use. A knowledgeable public is more likely to be receptive to healthy housing efforts and may help implement a healthy housing policy, program or practice in the way city stakeholders envision.

Conclusion

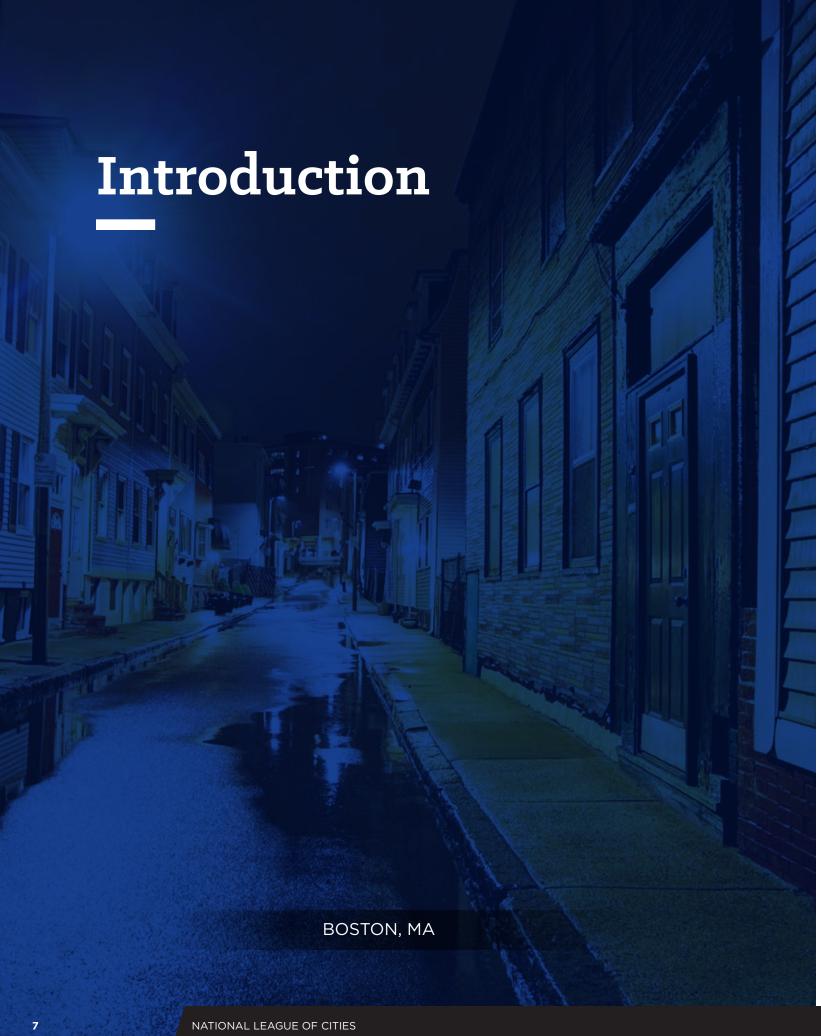
While the cities profiled in this report have taken important steps to improve healthy housing by implementing a range of policies, practices and programs that address lead and asthma triggers in homes, there is much more work to be done. The challenges and successes described in this report can serve as a starting point to inform other cities'. efforts.



A knowledgeable public is more likely to be receptive to healthy housing efforts and may help implement a healthy housing policy, program or practice in the way city stakeholders envision.

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The JPB Foundation provided the National League of Cities (NLC) with a one-year grant to conduct a landscape analysis of the strategies that municipal governments are utilizing to promote policies, programs and practices across the United States related to lead and asthma triggers in affordable housing.

Together with a team of researchers from the School of Public Health, Department of Health Policy and Management (the GWU team), NLC sought to identify evidence-based citylevel policies, programs and practices that lend themselves to replication and scaling by other cities interested in promoting healthy housing in their jurisdictions. The focus of this project was on city-led efforts to decrease lead exposure and/or remediate asthma triggers in private rental properties.

Methodology

This report is the culmination of five stages of research:

1 SURVEY OF MEMBER CITIES

NLC conducted a survey of its member cities about their policies, practices and programs around healthy housing. Cities were encouraged to describe historical, current, or potential future efforts to address healthy housing, including the scope of these efforts, actual and potential partners, barriers to progress, and whether these efforts were successful.

2 LITERATURE REVIEW

review of peer-reviewed, gray literature (e.g. reports and issue briefs), and news articles to identify successful city-level policies, programs and practices. GWU identified a dearth of peer-reviewed literature on healthy housing efforts that were either explicitly evidence-based or had policy evaluations. The gray literature, therefore, helped characterize the scope of efforts in healthy housing in cities across the country. The news articles included in the literature review highlighted recent efforts in healthy housing that were significant enough to warrant media attention.

SELECTION OF CITIES

Based on the information gathered in the literature review and member survey, the GWU team created a list of 55 cities with healthy housing efforts for potential inclusion in the project. NLC narrowed this list to healthy housing efforts in nine different cities:

CITY	TARGET	ТҮРЕ	MECHANISM	
Boston, MA	Asthma	Rental Licensing/Inspection, Breathe Easy at Home	Ordinance, Program	
Brooklyn Center, MN	Asthma	Rental Licensing/Inspection	Ordinance	
Cleveland, OH	Lead	Rental Licensing/Inspection	Ordinance	
Detroit, MI	Lead	Rental Licensing/Inspection	Ordinance	
Greensboro, NC	Asthma	Advancing Safe and Healthy Housing Initiative (Kresge)	Program	
Los Angeles	Asthma	Rental Licensing/Inspection	Ordinance	
Philadelphia, PA	Lead	Lead Court	Partnership	
Rochester, NY	Lead	Rental Licensing/Inspection	Ordinance	
Toledo, OH	Lead	Rental Licensing/Inspection	Ordinance	

These selections were made to include a mixture of healthy housing efforts that (1) address lead as well as asthma triggers in the home; (2) occur in geographically diverse areas of the country; (3) rely on a variety of approaches to address healthy housing; and (4) occur in cities of varied size, setting, and growth (a taxonomy of the cities selected is included in Appendix A) and (5) consider other factors including state preemption and financing approaches. Selection was also informed by NLC's knowledge of healthy housing activities in various cities, as well as NLC's relationships with contacts in cities who could participate in interviews elaborating on their city's efforts.

4 INTERVIEWS WITH CITY STAKEHOLDERS

NLC facilitated contact with city stakeholders in each of the nine cities. The GWU team then conducted semi-structured, hour-long interviews to better understand the enactment, implementation and enforcement of healthy housing policies, practices and programs in each city. Most importantly, these interviews sought the perspective and experience of city stakeholders about the barriers, challenges and necessary resources for healthy housing efforts in their cities, particularly as these pertained to sustaining efforts and potentially replicating and scaling similar efforts in other cities.

5 DEVELOPMENT OF A WHITE PAPER

This report represents the final stage of this project. It describes healthy housing policies, practices and programs examples from various cities based on the survey, literature review and city stakeholder interviews. The report is divided into four sections:

- Background on lead and asthma triggers in housing;
- Primary healthy housing interventions employed in the cities studied;
- Major challenges to, and opportunities in, healthy housing; and
- Key strategies for policymakers interested in implementing these or similar approaches.

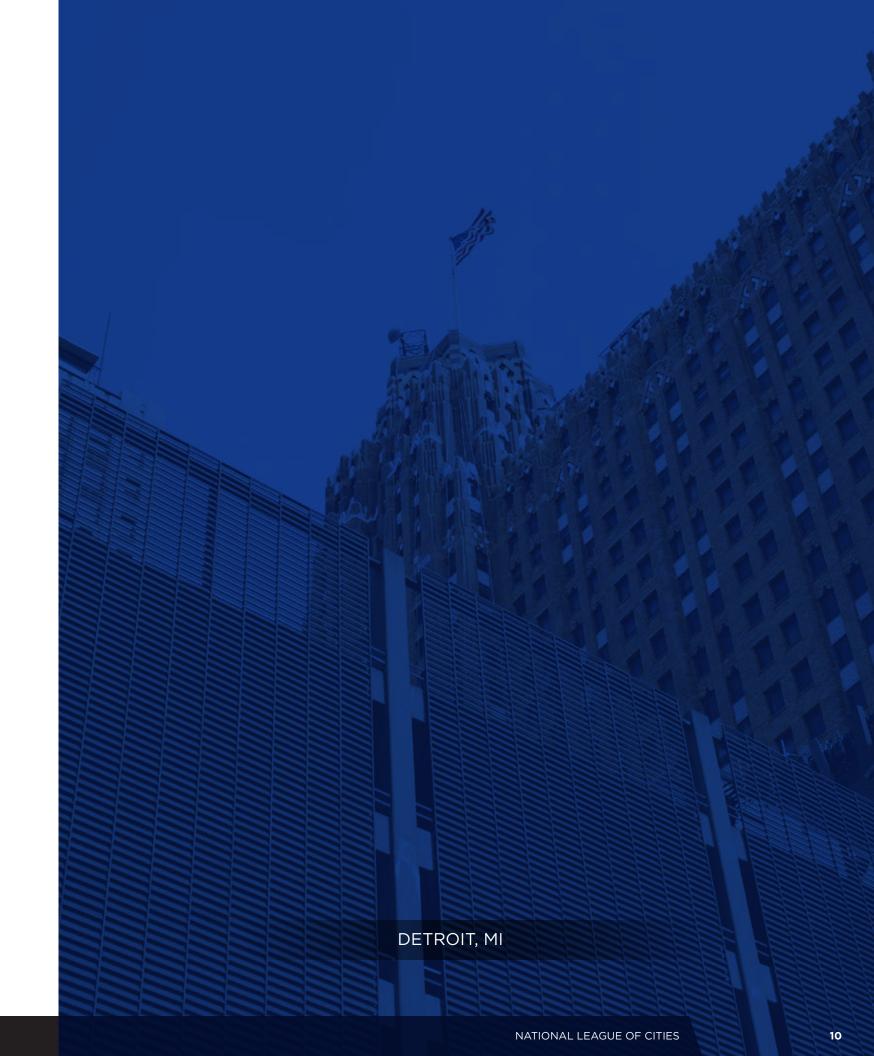
Limitations

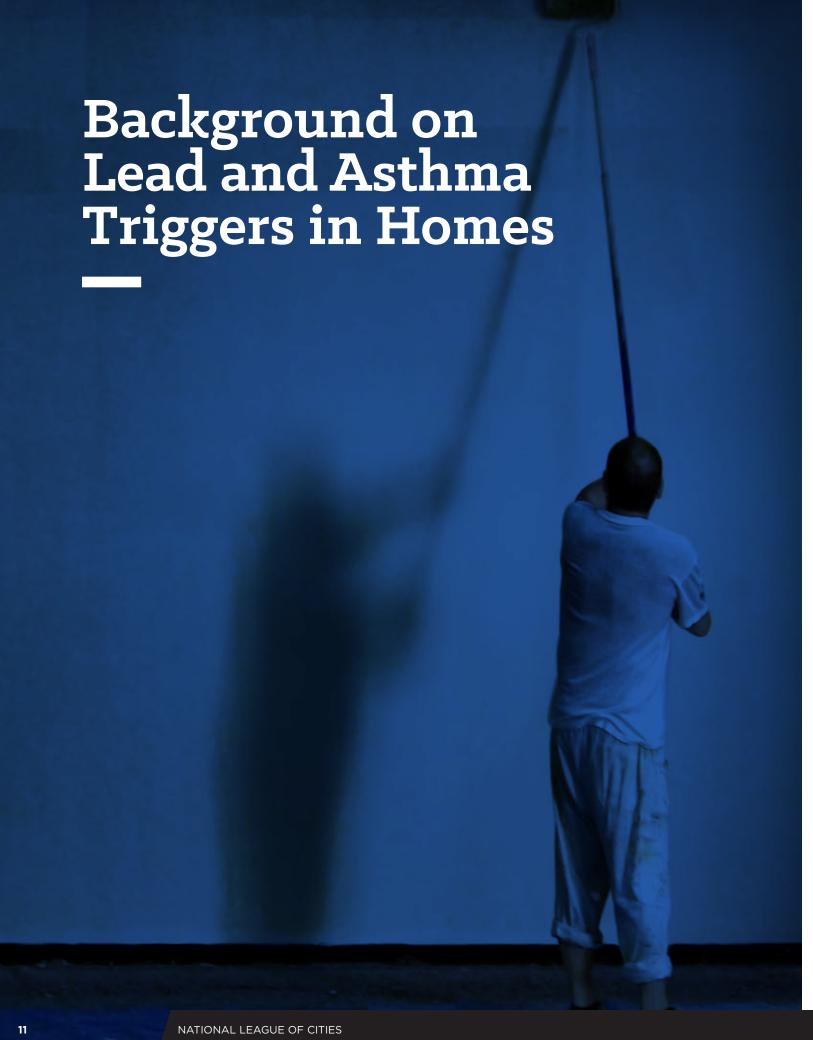
There are several key limitations to this report.

First, as described above, this project provides only a snapshot of the work that nine cities are undertaking to address lead and asthma through local healthy housing policies, practices and programs. This is not meant to be an exhaustive or representative sample, but rather a selection of potential examples of singular policies for other jurisdictions to consider.

Second, the scope of this project is limited to privately-owned properties; it does not address public housing. It is important to note that cities can and do leverage their housing authorities to create healthier living environments for city residents in public housing, but such efforts are beyond the scope of this project.

Finally, the scope of lead and asthma policies addressed in this report is not exhaustive. This paper focuses on lead paint hazards and excludes any work cities are doing to replace lead service lines—policies that have become particularly salient since the lead contamination crisis in Flint, MI.





Between lead hazards and asthma triggers, millions of Americans lack access to genuine healthy housing conditions.⁵

Lead poisoning has received increased media attention over the past several years, especially since 2014 when Flint, MI changed its water supply and treatment practices to compensate for a budget shortfall.⁶ The water crisis has left the city with a lead-contaminated water supply that continues to this day. However, a report by Reuters suggests Flint, MI is only one of thousands of cities in the United States with dangerously high lead poisoning rates. Nearly 3,000 areas surveyed have at least twice the rates of elevated blood lead levels of Flint and, among these areas, more than 1,100 have rates over four times higher.⁷

Because of high-profile incidents such as those that occurred in Flint, there is a common perception that water is the main source of lead poisoning in communities.⁸ However, as noted by Michael Pell, a member of the Reuters investigative team which reported on lead poisoning in cities across the United States, "[e]xperts believe that the major source of lead exposure comes from old, decaying paint." Many communities, including Flint, have had elevated blood lead levels that predate any contamination of water sources.¹⁰

Lead-based paint remains an enormous public health issue in the United States despite its ban by the Environmental Protection Agency (EPA) in 1978 because layers of older paint remain in homes built before that time. Over 37 million homes in the United States—one in three—have lead-based paint somewhere in the building. Not all present hazards to residents. According to the US Department of Housing and Urban Development (HUD), homes are considered safe if they have: less than the de minimis amounts of lead as defined by the Lead Safe Housing Rule; described to the US Department of Housing Rule; described they have:

lead levels below the Federal threshold for floors or windowsills,¹⁴ or bare soil lead levels below the Federal threshold.¹⁵ Nevertheless, 23.2 million (21.9 percent) US homes have one or more lead-based paint hazards.¹⁶

Such housing hazards have resulted in a public health crisis of lead poisoning. Between 1999 and 2010, an estimated 1.2 million cases of elevated blood lead levels (≥10.0 ug/dL) occurred among children between the ages of 12 months to 5 years old. TExposure to lead can lead to negative health outcomes, especially among children.¹⁸ Lead exposure can affect brain development and lead to a number of developmental and behavioral disorders including reduced attention span. lower educational attainment, and increases in antisocial behavior. With respect to physical health, exposure to lead may lead to anemia, hypertension, renal impairment, immunotoxicity, damage to the reproductive organs, coma and death.¹⁹

Asthma is no less serious a public health issue. According to the National Health Interview Survey, 20.4 million adults ages 18 and older – over 8 percent of the US adult population – have asthma, along with 6.1 million children (8.3 percent) under the age of 18. Between 1980 and 1995 the prevalence of asthma among children increased two-fold followed by a period between 2001 and 2010 during which asthma prevalence increased more slowly.²⁰ In 1980 white and black children had essentially the same asthma prevalence rates; by 2010, the prevalence of asthma among black children was double that of white children.²¹

There is no consensus among experts on exactly what has led to this rise in asthma prevalence.²² However, experts do agree that environmental exposure can affect asthma.²³

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45.8%

of all homes surveyed in the National Survey of Lead and Allergens in Housing had elevated levels of at least three asthma-related allergens.

The environments in which Americans live are rife with these types of exposures, especially in housing. Nearly half of all homes surveyed in the National Survey of Lead and Allergens in Housing (45.8 percent) had elevated levels of at least three asthma-related allergens.²⁴ Homes of individuals with asthma were found to have a greater number of allergens that exceed elevated levels than homes of individuals without asthma.²⁵ Disadvantaged communities are also more likely to have housing stock with structural issues that exacerbate asthma (e.g. poor ventilation that leads to mold, carpets that contain dust and dust mites, access points for rodents and insects, etc.).²⁶ Racial and socioeconomic disparities in quality of housing stock may explain some of the racial and socioeconomic disparities in asthma prevalence.

Allergens and asthma triggers can lead to the development or exacerbation of asthma at any stage of life. Asthma can cause shortness of breath, wheezing, coughing, tightness in the chest, and if not appropriately addressed, death. Asthma is the most common chronic illness among children in the United States and one of the leading causes of school absenteeism.²⁷

Federal, state and local governments have tried to address lead and asthma hazards with healthy housing policies designed to inform residents of potential hazards, hold private property owners accountable for the hazards on their properties, and prioritize addressing health conditions associated with unhealthy housing. For example, at the federal level, the Environmental Protection Agency (EPA) requires sellers and landlords of homes built before 1978 to disclose to potential buyers and lessees whether there are known lead hazards in the building and information on how to control such hazards.²⁸ Homebuyers are also entitled to a 10-day period for lead hazard inspection, but under federal law, potential lessees do not have this same opportunity before signing a rental agreement with their landlords.²⁹ Federally owned and federally assisted housing is also subject to HUD's Lead-Safe Housing Rule, which includes protections on disclosure of leadpaint hazards and rules regarding inspection and lead hazard mitigation. 30

At the state level, governments have enacted laws related to lead and asthma triggers as well. State lead laws primarily focus on secondary prevention of lead poisoning; often, they involve identifying children who already have elevated blood lead levels via blood lead screening and addressing lead hazards in the homes of those who have suffered lead exposure.31 Many state asthma laws also focus on addressing asthma in school settings, extending protections for children with asthma to where they spend a significant amount of time.³² Laws addressing home environment asthma triggers are less common. Smoke-free multi-unit housing requirements in a number of states allow landlords to ban smoking in rental units, but the extent to which state laws aggressively address asthma triggers in the home environment is limited.33

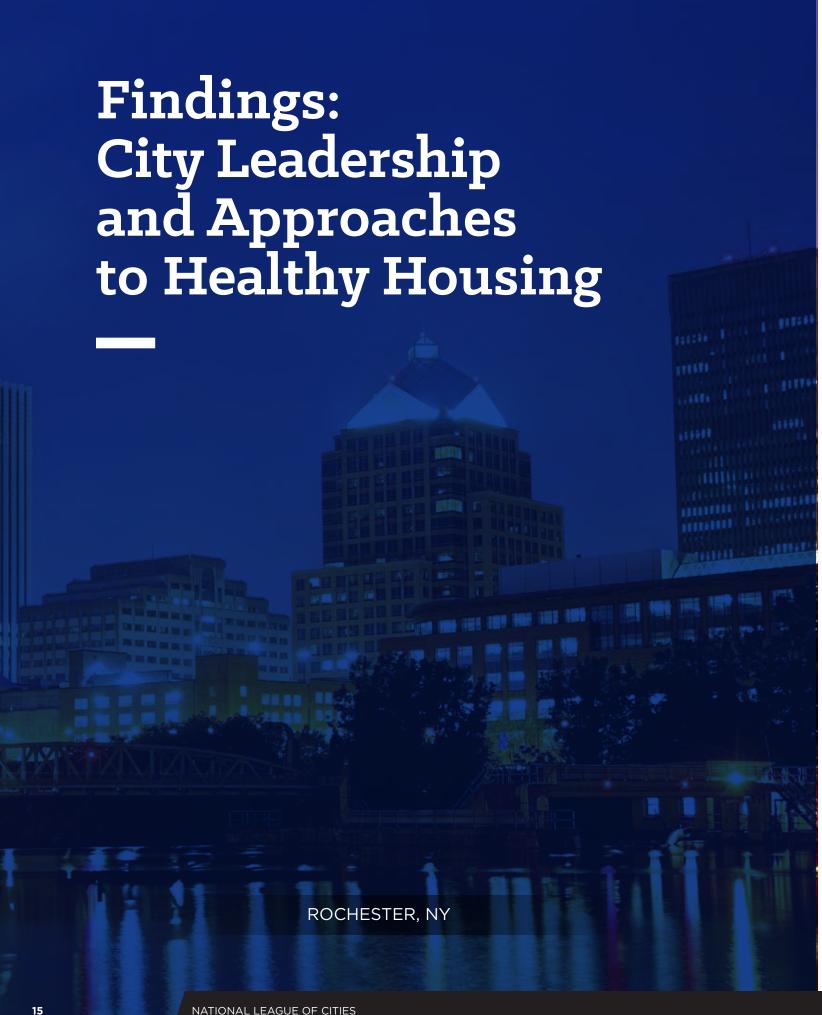
This report outlines city government efforts to address lead and asthma triggers in homes. While it discusses a number of effective approaches cities have utilized to address healthy housing (including rental licensing, proactive rental inspection, third party violation reporting, targeted arbitration, and rent withholding mechanisms), it is

unclear the extent to which these types of approaches have spread to other cities across the country as there has not been a full inventory of such programs to date. A brief search reveals several cities beyond those profiled in this report that have rental registration programs (e.g. Eastvale, CA;³⁴ College Station, TX;³⁵ Binghamton, NY;³⁶ Edwardsville, IL;³⁷ and Kalamazoo, MI³⁸), although such programs, without corresponding rental inspections, may do little to improve housing conditions. Many, but not all, of these cities pair their rental licensing with inspection requirements (e.g. Lancaster, CA;³⁹ Washington, IA;⁴⁰ Grand Forks, ND;⁴¹ Lawrence, KS;⁴² and Bedford, OH⁴³), although these inspections may or may not specifically target lead and asthma hazards. Even fewer cities have rent withholding mechanisms such as escrow accounts (e.g., Baltimore, MD⁴⁴ and Columbus, OH⁴⁵). It appears no cities have yet duplicated the third-party violation reporting or targeted arbitration systems described in this report. In all, there appears to be a lack of uptake in the healthy housing policies, programs and practices described in this report in cities across the United States.



Disadvantaged communities are also more likely to have housing stock with structural issues that exacerbate asthma.

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Despite state and federal efforts, there is still a great unmet need for healthy housing. Vulnerable communities are particularly affected, including people of color and individuals of lower socioeconomic status who, by virtue of having fewer housing options, are less able to be selective about their housing conditions.⁴⁶

The nine cities profiled in this report provide examples of the strategies city leadership can employ to increase accessibility to healthier housing to ensure children and families can reach their full potential and thrive.

Rental Licensing and Inspection: An Overview

While the cities in this report use different approaches to ensure healthier housing, most couple their rental registration or licensing system with a rental inspection system.

Most cities have standards for the condition of rental housing based on local building codes. Because building codes are often designed to protect the health of buildings, not residents, city leaders must be deliberate in designing and/or amending building codes with a human health focus before they can begin considering what policies, programs and practices are appropriate and effective to enforce these codes. Even when cities have building codes that focus on protecting the health of residents by ensuring adequate housing conditions they may lack proactive systems to ensure that these conditions are met.

One proactive mechanism to ensure healthy housing conditions that some cities employ is requiring landlords to register and/or obtain a rental license before being able to rent to

tenants. This registration or licensing system creates a "hook" for implementing more proactive inspection systems to address lead and asthma trigger exposures. However, in cities where landlords are not required to obtain a license, rental inspections may not occur until after a complaint about a potential violation is received and an inspector is sent. In the context of lead or asthma trigger exposure, this means that children and adults are already likely exposed, sometimes for long time periods, before any mitigation can occur. From a primary prevention perspective, rental licensing coupled with rental inspection provides an effective way to identify and begin addressing potential lead poisoning and asthma hazards in the home before residents are exposed to the hazards.

Proactive Rental Inspection

Many proactive rental registration programs make rental licenses contingent on units passing rental inspections. This system creates healthier housing by proactively identifying potentially unsafe housing conditions and addressing them before a tenant can be exposed. **Rochester, NY** is an exemplar in rental registration programming coupled with proactive rental inspection. The city's work has inspired a number of cities to enact their own healthy housing rental registration/rental inspection ordinances.

ROCHESTER, NY

Rochester, NY is routinely identified as the gold standard in city-level healthy housing policies and programming in the United States, both in terms of efficacy and evaluative history. All properties in Rochester (barring a handful of exceptions, such as owner-occupied buildings) require the owner to obtain a certificate of occupancy before individuals are legally permitted to live in the building. The requirements for certificates of occupancy are as follows:⁴⁷

TYPE OF PROPERTY	REQUIREMENTS		
■ One or Two Family ■ Owner Occupied	■ No Certificate of Occupancy required		
■ One or Two Family, Occupied by the Owner's Spouse, Child, Parent or Sibling	 A Certificate of Occupancy Exemption may be obtained by submission of the required application and proof of residency & relationship. The Exemption, once approved, must be renewed every (3) years 		
■ One or Two Family ■ Non-Owner Occupied	 Certificate of Occupancy required every six years Except, renewal required every three years if: The Certificate of Occupancy for a one or two family dwelling is issued on or after 1/1/2014 The property is located in a Lead High-Risk Area Interior Deteriorated Paint is found during the Certificate of Occupancy inspection; and Interim Controls are used to remedy the lead hazard 		
■ Mixed Occupancy Building containing 1 or more dwelling units	■ Certificate of Occupancy required every three years		
■ Multiple Dwelling	■ Certificate of Occupancy required every three years		

This table highlights how the city has used its existing inspection process to promote healthy rental housing. Rochester's Lead-Based Paint Poisoning Prevention Ordinance, 48 passed in December 2005 and implemented in July 2006,49 requires that rental units constructed before 1978 pass inspections for lead safety before receiving certificates of occupancy. Further, properties in lead high-risk areas, as designated by the mayor based on Monroe County Department of Public Health data and blood lead level data, must undergo additional inspection procedures to ensure the units are lead safe.

Inspections to obtain certificates of occupancy in pre-1978 rental units include a visual assessment for deteriorated paint and bare soil violations.⁵⁰ Buildings with five or fewer units located in high-risk areas must also undergo dust-wipe tests⁵¹ to ensure units are lead safe, even if they pass a visual inspection. Rochester maintains consistency and

high standards across inspections with a program that trains inspectors to work closely with landlords/tenants to resolve problems and serve as resources to the community, rather than as adversarial parties.

Analysis suggests blood lead levels decreased among children in Rochester after implementation of the ordinance. In the two years before implementation, 7.5 percent of children under the age of six who were tested had elevated blood lead levels compared to 5 percent in the two years after implementation of the ordinance.⁵² Over the first decade of the ordinance, the incidence of elevated blood lead levels among children under the age of six dropped 85 percent.⁵³ Elevated blood lead levels in Monroe County, home to Rochester, NY, decreased nearly two and a half times faster than elevated blood lead levels in New York State, and nearly 2 times faster than the United States as a whole between 1997 and 2011.54

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Interviewees from Rochester pointed to Cleveland as another example of an effective (and newer) proactive rental inspection program. Cleveland has had a rental registration system in place since the late 1980s, and its inspection system was previously established.⁵⁵ These systems were until recently hamstrung by a lack of funding; while the rental registration system continued, the accompanying inspection program was shuttered, severely limiting the ability of the registration system to ensure healthy housing conditions. Recently, however, Cleveland has been able to reestablish its rental registration and inspection program.

CLEVELAND, OH

In 2017, Cleveland began a new rental registration program that includes an inspection component to ensure private and pass a reinspection. Landlords rental units comply with housing codes. Funded by an income tax increase, the city has hired additional inspectors to inspect the city's approximately 84,000 units. Cleveland also charges a \$35 registration fee per unit (with exceptions for owner-occupied units) to and Housing Department issued 144 fund the program.

The law requires that inspectors send letters to landlords requesting access to units for inspection three to four weeks in advance of the registration, and landlords (or on-site tenants)

3,259 rental units inspected to ensure compliance with housing codes in Cleveland, OH.

voluntarily provide access to units for inspection. Units that fail inspection have 60 days to address violations who remain noncompliant with orders to address violations can have their rental registrations revoked and/or face misdemeanor tickets from the Cleveland Municipal Housing Court. Between July 2017 and April 2018, Cleveland's Building such tickets.56

The frequency of inspections is determined by an inspection schedule established by the Director of Building and Housing. The city's current plan is to spend the next five years ensuring each rental unit in the city has had a baseline inspection. Upon evaluating the data collected through these inspections, the city will determine and make any necessary changes.⁵⁷ During the first year of the program, the city expects to inspect approximately 8,000 rental units. The city has inspected 3,259 rental units in the first eight months of the program.⁵⁸

Licensing requirements can also be combined with optional inspections to certify housing as lead-free. For example, landlords in **Philadelphia** must obtain a Housing Rental License annually in order to rent their units but, as described below, may or may not have an inspection.

PHILADELPHIA, PA

In Philadelphia, landlords must have a license to rent housing. They may receive a certificate of lead-free or lead-safe housing, contingent on passing inspection and risk assessment by a certified lead inspector. However, landlords are not obligated to have an inspection at all if they provide a form to the Philadelphia Department of Health that discloses a comprehensive lead inspection was not performed and thus the property "likely contains lead-based paint."

Philadelphia's Lead Paint Disclosure and Certification Law requires landlords of units built before 1978 to disclose whether the unit contains lead paint prior to leasing the property to potential tenants with children six years of age

or under. This law builds upon the Philadelphia Property Maintenance Code which already requires that landlords address healthy housing hazards such as peeling paint, cracked or loose plaster, and other housing repair issues. Landlords are required to certify their units are lead safe before tenants with children under six years of age and younger take up occupancy.

The Philadelphia Department of Public Health (PDPH) maintains surveillance data on lead hazards in the form of blood lead levels among children. When children with elevated blood lead levels are identified. their homes are scheduled for inspection. If inspectors discover lead hazards in the home, the landlord is legally required to remediate these hazards.



Rental inspections can also occur in a non-ordinance based capacity. In **Greensboro, NC,** the Greensboro Housing Coalition works with the Kresge Foundation on its Advancing Safe and Healthy Homes for Children and Families Initiative (ASHHI) to identify and eliminate asthma triggers in rental units in the city.

GREENSBORO, NC

By ordinance, landlords in Greensboro, NC are subject to periodic inspections of rental units if there is "reasonable cause to believe that unsafe, unsanitary, or otherwise hazardous or unlawful conditions may exist in residential rental buildings or dwelling units."59 "Reasonable cause" can include complaints, requests for inspection, Department of Inspection knowledge of unsafe conditions within a rental unit, violations visible from outside a rental unit, and a history of more than two uncured verified violations within 12 months.⁶⁰ As such, the Greensboro ordinance is not unlike many other complaint-based rental inspection ordinances in cities across the country.

However, Greensboro is unique in the nonordinance based work it does in healthy housing. Since 2012, the Greensboro Housing Coalition has worked with the Kresge Foundation on its Advancing Safe and Healthy Homes for Children and Families Initiative (ASHHI) to improve rental housing conditions in the city. The coalition received funding to begin a demonstration project entitled "Removing Asthma Triggers and Improving Children's Health" in which it worked with partners at the University of North Carolina at Greensboro, Triad Healthcare Network and Cone Health to improve housing conditions in the homes of 41 pediatric asthma patients between 2013 and 2015. 62 The demonstration project enabled interventions such as repairing leaks and improving ventilation that successfully reduced asthma burden among these patients. 63 Pediatric asthma patients who received this intervention slept better, had an easier time working at school and home, used their asthma medications less, and required fewer health visits. 64 Among households that received follow up visits, there was a 50 percent reduction in hospital bills. 65

Since the ASHHI project, the Greensboro Housing Coalition has taken an even broader approach to asthma prevention by looking beyond the physical home environment to the neighborhoods in which the most impacted communities live. Its Collaborative in Cottage Grove, a community built on the site of the old city dump which faces a number of environmental issues that negatively impact residents' health, is a grassroots effort to affect change and improve housing and neighborhood conditions by working with the community and local leaders to prioritize initiatives that promote better health.⁶⁶

Proactive rental inspections are not only useful in identifying and mitigating potential lead and asthma hazards in rental housing, but also in providing policymakers with data to help inform future healthy housing and inspection efforts. An analysis of inspection data from Rochester, NY suggests that while nearly two-thirds of the variation in reported violations (64 percent) in rental housing can be explained by differences in the age and value of rental units, "[t]he remaining variation suggests that housing inspection data add significant information about home health hazards beyond what might be predicted on the basis of home age and assessed value alone." With these data, it is possible to further target healthy housing efforts.

Targeted Registration and Inspection

A universal rental licensing requirement and/or proactive inspection requirement would theoretically provide broad benefits. However, inspecting and registering every unit in a city, particularly in larger cities that easily surpass 100,000 rental units, can be labor intensive and costly. Therefore, some cities have developed requirements to specifically allocate enforcement resources toward the most vulnerable populations and highest risk areas. Rental registration and inspection may be required based on the type of occupant living in the rental unit (usually a child who can be negatively impacted by unhealthy housing conditions such as lead or asthma triggers), the age of the home (usually pre-1978, before lead paint was outlawed), the location of the home (usually in areas in the city which surveillance data has demonstrated high risk for lead or allergens), or number of units in the building. For example, **Toledo, OH** passed a law with targeted rental registration and inspection requirements based on the age of buildings and number of units in the building.

TOLEDO, OH

Housing regulations in Toledo set minimum standards of hygiene and sanitation for private dwelling units.⁶⁸ These regulations also authorize the Health Commissioner to inspect units within the Lucas County Health district to enforce these minimum standards.⁶⁹ Current regulations do not explicitly mention the healthy housing hazards identified throughout this report (i.e. lead or asthma triggers) nor do they explicitly mention private rental units. However, during the drafting of this report, Toledo did have a Lead Safe Ordinance which specifically addressed lead hazards in private rental units after being passed by the Toledo city council in 2016.⁷⁰

Toledo's Lead Safe Ordinance required landlords of buildings built before 1978 with four or fewer units to register with the Toledo-Lucas County Health Department. ⁷¹ This registration required landlords to first obtain a Lead-Safe Certificate by passing a local lead inspection by a local lead inspector. Similar to practices in other localities, inspections would include a visual assessment to identify lead hazards (e.g. peeling paint) as well as a dust-wipe test for lead.

Lead-Safe Certificates would last for six years; units that failed initial inspection but passed subsequent inspections would receive certificates that lasted three years. Units that had undergone lead

abatement—permanent elimination of lead hazards consistent with Ohio Law and with corroborating inspection results—would receive certificates that last 20 years. The inspections themselves were slated to cost approximately \$300 per property in addition to a registration fee of \$45.72

Toledo proposed a staggered implementation of its lead safety requirements based on census tract. The first of three registration deadlines, June 30, 2018, applied to approximately 12,500 rental units in the highest lead-risk census tracts. The second and third waves of registration and implementation would occur on June 30, 2019, and June 30, 2020, respectively. Toledo's Lead Safe Residential Property and Family Child Care Home Registry would provide the public with information on which rental properties are in compliance with the ordinance.

Before the city could begin implementing its Lead Safe Ordinance, a group of property investors sued the city alleging the ordinance was unconstitutional.⁷⁵ On June 15, 2018, just two weeks before the first registration deadline, Lucas County Common Pleas Court granted a preliminary injunction preventing the City of Toledo from enforcing the ordinance.⁷⁶ Shortly before publication of this report, the ordinance was struck down.⁷⁷ Further discussion of this ruling can be found in the Major Challenges section of this report beginning on page 29.

Performance-Based Rental Licensing

Performance-based rental licensing is a specific type of focused rental licensing that cities use to further improve healthy housing and alleviate cost concerns while still maintaining adequate oversight and enforcement of rental housing. Performance-based rental licensing generally divides rental units into different licensing categories by number of violations reported. Owners of units with fewer violations are placed into preferred (i.e. less burdensome) licensing categories, similar to the system in **Brooklyn Center, MN**, described below. Cities could alternatively consider rental licenses that last a standard duration, but cost more for landlords with numerous violations.

BROOKLYN CENTER, MN

Brooklyn Center, MN has had rental licensing since 1975.78 Barring several exceptions (e.g. rented rooms within an owner-occupied dwelling), landlords are required to obtain rental dwelling licenses before renting their private properties to tenants. The Brooklyn Center City Council sets fees for initial licensing and renewal by resolution.79 Landlords must agree to undergo inspection in their rental license application before rental licenses can be issued.

In 2010, Brooklyn Center also implemented a performance-based rental licensing system. This system divides licenses into categories based on the number of property code and nuisance violations discovered during initial or renewal inspections. While licensing fees remain

the same across categories, rental licenses expire less frequently in units with fewer violations. The license categories are listed below (see chart below):

There are approximately 850 rental units in the city. Of the 758 inspections on record as of March 2018 (the units that are not included in this number are either currently in the renewal process or their licenses have expired), 36 percent were categorized as Type I (the lowest violation tier), 45 percent were categorized as Type II, 14 percent were categorized as Type III, and four percent were categorized as Type IV.80

Type III licenses require landlords to submit an action plan, and Type IV licenses require

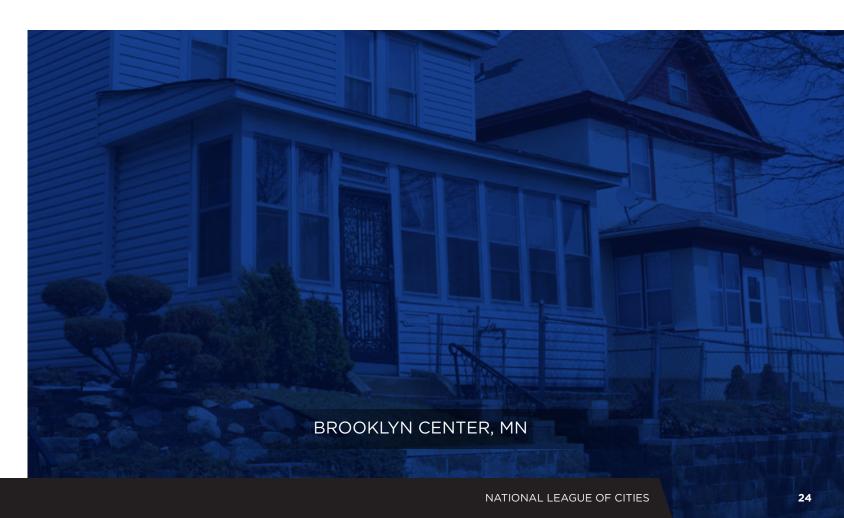
LICENSE CATEGORY	NUMBER OF UNITS	PROPERTY CODE VIOLATIONS PER INSPECTED UNIT	VALIDITY OF RENTAL LICENSE
Type I	1-2 3+	0 - 1 0 - 0.75	3 Years
Type II	1-2 3+	1 < x ≤ 4 0.75 < x ≤ 1.5	2 Years
Type III	1-2 3+	4 < x ≤ 8 1.5 < x ≤ 3	1 Year
Type IV	1-2 3+	> 8 > 3	6 Months

landlords to submit a mitigation plan.⁸¹ These plans are designed to address the violations found in units in conjunction with the city so that the overall conditions of rental units improve. While similar, mitigation plans also require the landlord to submit a monthly report about ongoing efforts to address violations.⁸²

Brooklyn Center also does one-on-one and group outreach to landlords. City officials talk with individual landlords and answer questions upon registration and renewal of rental units. Additionally, the Association of Responsible Management (ARM) brings together landlords and city officials "to foster a cohesive and respectful community for all by promoting clean, safe, and attractive rental properties." ARM sends out a newsletter and meets every other month to discuss responsible property management. 84

For landlords with lower licensure categories, ARM meetings are optional, but landlords with higher licensure categories are required by ordinance to go to a certain percentage of meetings (Type IV are required to attend 50 percent of ARM meetings over the course of 6 months; Type III are required to attend 25 percent of ARM meetings over the course of 1 year).85

A city's decision to employ one rental registration/licensing system does not necessarily render other strategies described in this report unnecessary. For example, a city with a rental registration policy and proactive rental inspection program that focuses on certain high-risk neighborhoods would likely still have a complaint-based rental inspection system to address potential code violations in non-high-risk areas.



Third-Party Violation Reporting

Some cities profiled in this report have unique violation and reporting systems. For example, because tenants may be hesitant to report potential code violations out of fear of retaliation from their landlords, a city may employ a violation reporting system that enables other stakeholders such as healthcare providers to report potential code violations. Boston, MA's Breathe Easy at Home program allows healthcare providers to request inspections of their patients' homes if they appear at the clinic with asthma and the symptoms are related to the home environment.

BOSTON, MA

Owners of private residential rental housing units in Boston must register each year with the city's Inspectional Services Department (ISD).86 The initial registration fee is \$25, and annual renewal fees are \$15 for each rental unit. Outside of several circumstances in which a landlord is exempt (e.g. rental units in buildings with six or fewer rental units, one of which is occupied by the owner), a landlord who does not register his or her property with ISD will be fined \$300 per month until registering the unit.

Rental units must be inspected at least once every five years. Units are inspected in accordance with the State Sanitary Code.87 the State Building Code, 88 the City of Boston Zoning Code, 89 and federal, state, and local fair housing regulations. A landlord has 30 days from ISD issuance of an inspection notice to advise ISD how they would like the unit to be inspected. Inspections can be conducted by ISD itself or by non-ISD authorized inspectors; at least 5 percent of authorized (i.e. non-ISD) inspections are periodically and randomly audited by ISD.

Boston employs a chronic offender point system for landlords who fail to register or repeatedly fail to comply with notices of violations. For example, failing to register a unit or completing the inspection requirement is a one point violation. Failing to comply with an ISD notice of violation under the state sanitary code is another one point violation. Once landlords accumulate a certain amount of points (based on the number of rental units owned), they are classified as chronic offenders and may be fined \$300 per point subsequent to their classification as chronic offenders.

Broadly, there are three entries to rental inspection in Boston: 1) proactive inspections that occur in the process of obtaining a rental registration, 2) complaint-based inspections that occur when tenants report possible code violations, and 3) inspections triggered by the Breathe Easy at Home Program.

Boston's Breathe Easy at Home Program is an innovative approach used to augment the city's existing complaint-based and proactive rental inspection system. Appearing at the clinic with asthma symptoms is a potential sign of unhealthy living conditions that can be identified and addressed via the existing rental inspection process. Accordingly, Breathe Easy at Home is a web-based referral system healthcare professionals can use to refer their patients with asthma who live in Boston for a home inspection.90 Since 2005, thousands of Boston residents with asthma have benefitted from the referral system. As healthcare providers have become increasingly familiar with the Breathe Easy at Home web-based referral system, referrals for inspection have trended upwards.⁹¹ Further, approximately 70 percent of these referrals reach resolution without the intervention of housing court. 92 Qualitative analysis suggests clinicians, inspectors, and other healthy homes stakeholders believe the program is effective at improving housing conditions and asthma outcomes.93

Targeted Arbitration Systems

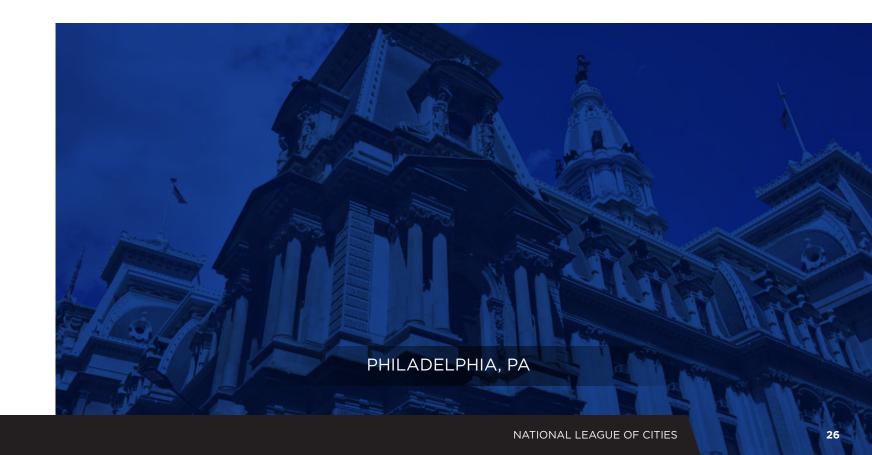
Cities may also utilize arbitration systems that enable authority figures such as lawyers and judges to assist tenants in obtaining better housing. For instance, in Philadelphia, the city's Lead Court is a specific court designed to address landlord noncompliance with lead remediation orders.

PHILADELPHIA, PA: LEAD COURT

In 2002, in a partnership between the Philadelphia Department of Public Health (PDPH), the Office of the City Solicitor, and the Court of Common Pleas. Philadelphia created a "Lead Court" for landlords who did not address lead hazards once they were discovered in their properties. Previously, landlords who were not compliant with orders from PDPH to address lead hazards faced few repercussions, as PDPH did not have authority, by itself, to force landlords to address identified lead hazards.94 Lead Court is unique in that it is both a) exclusively designed to address mitigation and/or abatement of lead in properties and b) a multi-sector approach which brings together

both the expertise and the authority of stakeholders across the city to hold landlords accountable for healthy housing.

Not all landlords with failed inspections end up in Lead Court. Landlords who successfully address lead hazards upon inspections triggered by blood lead levels can avoid Lead Court entirely. However, if inspectors discover lead hazards upon reinspection of a property and remediation efforts have not begun, the cases are referred to Philadelphia's Lead Court. Research suggests Lead Court is effective at getting landlords to address identified lead hazards:95 a majority of landlords who go through Lead Court are compliant with PDPH orders within one year.



Rent Withholding Mechanisms

Finally, several cities provide tenants with opportunities to withhold rent from landlords who do not address violations identified in rental housing units. When lessees enter into contracts with landlords, they are contractually obligated to pay rent and may be evicted for failure to pay. Several cities with rental licensing and inspection systems have set up escrow accounts that tenants may pay in to instead of paying their rent to their landlords directly. These cities can hold this money until landlords meet requirements as established by city, state and federal code and, by acting as a third party to landlord-tenant contracts, can shield tenants from eviction. Both **Los Angeles, CA** and **Detroit, MI** have escrow accounts to encourage landlords to promptly resolve violations that can negatively impact healthy housing.

LOS ANGELES, CA

Since 1998, the city of Los Angeles has required most owners of rental properties with two or more units to undergo inspection at least once every four years. The inspections are conducted under the Systematic Code Enforcement Program (SCEP) administered by the City of Los Angeles Housing Community Investment Department (HCIDLA). HCIDLA collects a regulatory fee of \$43.32 per unit per year to finance the costs of inspection and enforcement. HCIDLA has 96 inspectors dedicated to SCEP.

If inspectors discover violations of the Housing Code upon inspection, HCIDLA issues an order to fix the violation.

Reinspection determines whether the landlord

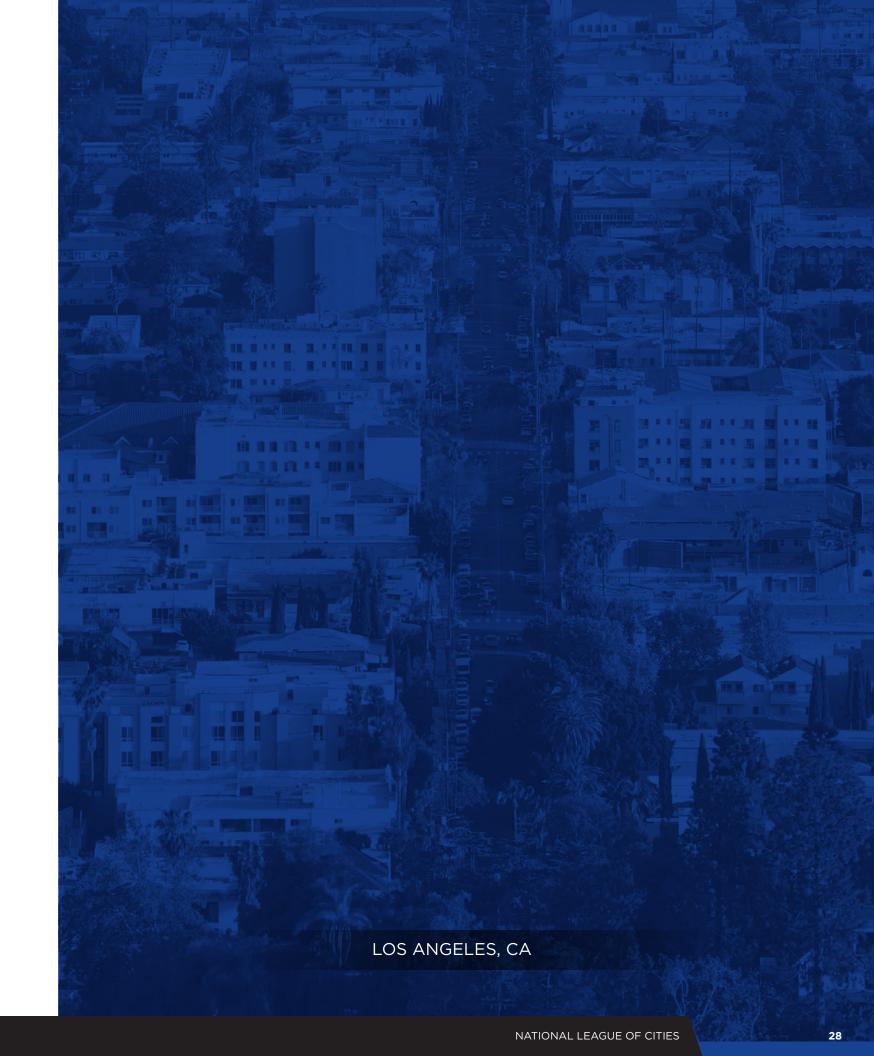
NATIONAL LEAGUE OF CITIES

has complied with this order. If properties are not in compliance within a certain period of time, as determined by HCIDLA, or there are specific issues of noncompliance HCIDLA finds particularly problematic, HCIDLA can schedule these properties for inspection once every two years.

The city also has a Rent Escrow Account Program (REAP)⁹⁷ which HCIDLA manages. Tenants living in units with unaddressed housing code violations may have their rent reduced between 10 and 50 percent based on the severity of the violation,⁹⁸ as determined by the Rent Adjustment Commission (RAC) Regulations.⁹⁹ Tenants may also pay their rent into an escrow account which withholds rent from landlords until violations have been addressed as determined by HCIDLA.



Since 1998, the city of Los Angeles has required most owners of rental properties with two or more units to undergo inspection at least once every four years.



Detroit also operates an escrow account under its new rental registration and inspection ordinance passed in 2017.¹⁰⁰ Detroit had a rental ordinance in place prior to 2017, however, rental requirements had not been seriously enforced for over ten years.¹⁰¹ In 2016, only 4,174 rental addresses in Detroit were registered and inspected by the city's Buildings, Safety, Engineering & Environmental Department (BSEED) despite U.S. Census Bureau estimates that the city has upwards of 140,000 rental units.¹⁰² Unregistered rental units have created a housing crisis in the city where one in five of Detroiters face eviction from rental units most of which are unregistered and thus, by law, illegal.¹⁰³ Families who face eviction from these units have often had to deal with conditions that violate housing code including pest infestation, missing windows, and poor heat during the winter, all of which can exacerbate health conditions such as asthma.¹⁰⁴ The city's escrow account has provided tenants with a mechanism to ensure their landlords are abiding by housing code and protects them from retaliation from landlords for withholding rent.

DETROIT, MI

In Detroit, a rental unit must be registered with the city's Buildings, Safety, Engineering & Environmental Department (BSEED), pass an inspection, and obtain a certificate of compliance in order to rent a property to tenants in the city. One- or two-family dwellings which pass inspections receive certificates that last for three years, while rental properties in other types of buildings must renew their registration once every two years.¹⁰⁵

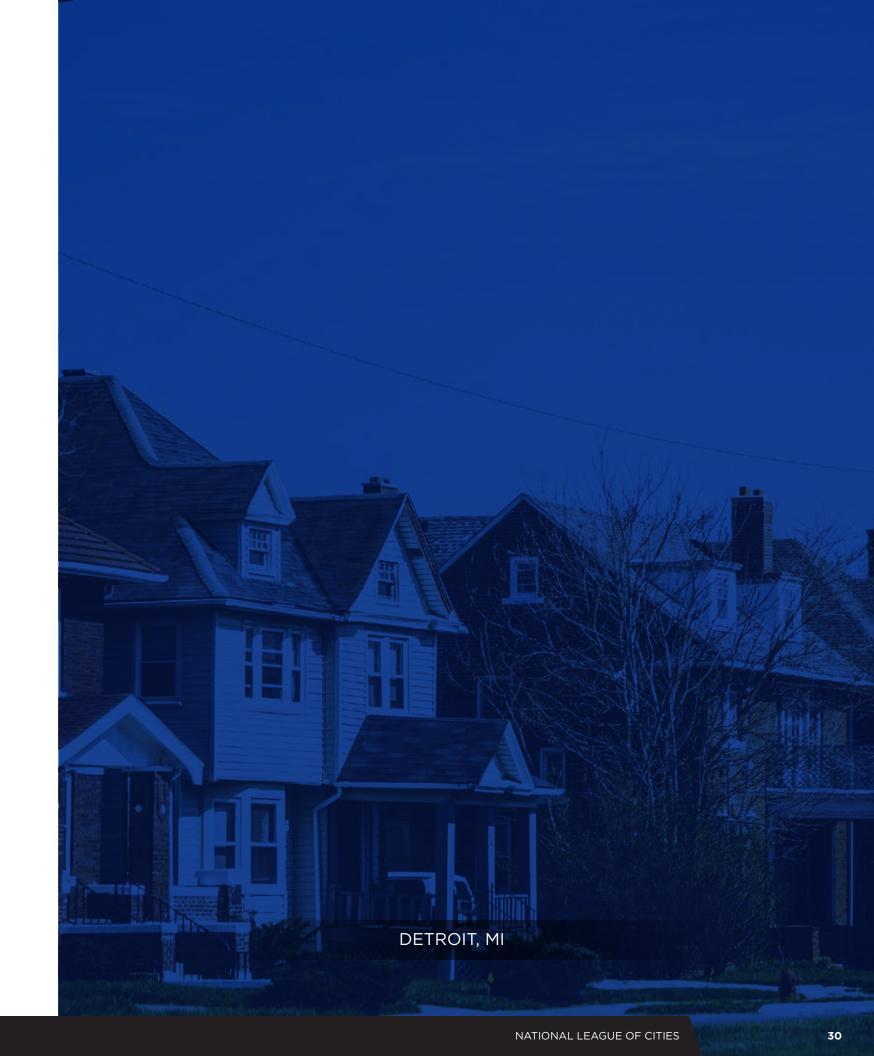
The city's rental ordinance has a specific section for lead that requires all units to be inspected for lead paint hazards. If lead paint hazards are identified at the initial inspection, units must obtain an annual lead clearance report. Depending on how thoroughly the lead hazard

4,174

number of rental units in Detroit not registered and inspected. The U.S. Census Bureau estimates the city has upwards of 140,000 rental units total. is dealt with, units may transition to required lead clearance reports every two years or every five years. Complete lead abatement removal does not require future lead clearance reports.

Tenants living in units that remain noncompliant with this ordinance may put their rent in escrow to be withheld from landlords until their units pass inspection and receive a certificate of compliance. If violations are not addressed within 90 days, tenants can receive their rent money back. This process continues every 60 days thereafter. It is illegal for a landlord to evict a tenant for using the city's escrow account to withhold rent money for noncompliance with the rental registration and inspection ordinance.

The city is currently staging its rollout of the rental registration and inspection programs and is prioritizing timing of zip code rollout with the areas of the city that have the highest percentage of children with elevated blood lead levels. City officials are phasing in compliance by zip code beginning in August 2018 and expect all rental properties to be in compliance by 2020. While the city is still in the early stages of rollout, the massive number of properties implicated, as well as initial opposition from landlords, will make implementation challenging.



Major Challenges CLEVELAND, OH

Stakeholders interviewed for this project described a number of challenges faced in implementing effective healthy housing policies at the city level.

LANDLORD OPPOSITION

One major barrier to implementing healthy housing policies in private rental units is overcoming the opposition landlords have to increased requirements and subsequent increases in costs related to business. While not all landlords are resistant to initiatives that promote healthier housing, many landlords who do oppose such measures are often the landlords whose units necessitate the implementation of such measures in the first place. They often operate with very small margins in lower-income communities and are resistant to additional requirements that reduce profits. In Toledo, OH, the Property Investor's Network, a collection of property investors, joined together with a Toledo landlord to sue the City of Toledo and the Toledo-Lucas County Health Department board arguing that the city's new rental registration and inspection ordinance is unconstitutional.¹⁰⁷ On July 20, 2018, Lucas County Common Pleas Judge Linda Jennings ruled in favor of the landlords. declaring the ordinance unconstitutional and discriminatory against landlords with targeted units.¹⁰⁸ While the city is appealing this ruling, it is developing a voluntary lead inspection ordinance to circumvent the concerns raised by landlords of older buildings that they are being illegally targeted.¹⁰⁹ However, city officials expect a voluntary program will have lower participation rates than the previous, targeted inspection ordinance.¹¹⁰

In Detroit, where landlords did not challenge the city's healthy housing policy through the court system, city leaders have still faced issues with landlord compliance. Detroit landlords may be unwilling or unable to bring their units into compliance with property maintenance codes, for a variety of reasons. Whether these compliance issues will continue as more zip codes in Detroit are required to have code

compliant rental units is unclear, but the city has emphasized educating landlords and tenants about the ordinance and resources available to come into compliance.

TENANT RESISTANCE OR CONCERNS

Tenants may also be resistant to allowing inspectors into their homes. The rationale behind tenant opposition to healthy housing is less obvious than landlord opposition, particularly as healthy housing policies stand to benefit tenants the most. Interviews suggest that tenants may understand the benefits of, for example, rental inspection requirements but may be resistant to them because they do not believe the benefits outweigh the costs of allowing inspectors into their homes. Tenants may fear retaliation from their landlords. They may also live in units that are well under market rate in their city and may be concerned landlords will shift the costs of compliance with code violations to them. They may fear that their housing could be declared uninhabitable, or that their landlords may not be willing to comply with orders to address violations and face eviction. This concern is particularly relevant among tenants who have already been evicted before and struggle to find rental housing. Finally, some tenants, such as undocumented immigrants, may generally be wary of government intervention.

As Detroit begins implementing its rental registration and inspection ordinance, tenants have echoed many of these concerns. Detroit currently has one of the most affordable housing markets in the country and tenants worry changes in the rental housing market due to the cost of complying with the city's new rental registration and inspection ordinance could eliminate a significant portion of this naturally occurring affordable housing

leaving them with few housing options. 114 However, the city is rolling out other affordable housing initiatives designed to protect affordable housing in the city including a \$250 million affordable housing fund that could help preserve and rehabilitate 10,000 existing units of affordable housing and build 2,000 additional affordable housing units.¹¹⁵

While tenant opposition may be more multi-factorial than landlord opposition, it is no less important that cities interested in implementing effective healthy housing policies are able to overcome it. For example, **Cleveland, OH**'s new rental registration and inspection ordinance is written in a manner that generally relies on the voluntary participation of both landlords and tenants to open rental units up for rental inspection.

POLITICAL CLIMATE

Political climate extends beyond the receptivity of parties immediately involved in a healthy housing policy, program or practice (i.e. landlords, tenants, and the administering city agency); it also includes bureaucratic resistance and/or inertia from the city government as a whole. Agencies whose work stands to change or whose power will be modified may be resistant to healthy housing efforts, even when other municipal agencies are in favor of implementing policies. It is important stakeholders interested in healthy housing policies, programs and practices understand the political dynamics involved in their cities. How agencies work together, who are the most powerful political actors in the city, and what is the desire for change are all important questions stakeholders must understand in developing healthy housing strategies. An effective city level healthy housing policy, program or practice, necessitates support from all levels of city government involved in the efforts as well as the public.

SCOPE OF CITY AUTHORITY

As in other areas of policy, cities that change rental housing requirements may be challenged on the basis of exceeding their authority. For example, the Lucas County Common Pleas court ruled that the City of Toledo City Council exceeded its authority in implementing its rental registration and inspection ordinance by delegating its enforcement powers to the Toledo-Lucas County Health Department. 116 This unconstitutional delegation resulted in the city's Lead Safe Ordinance being struck down in court. Policymakers considering new rental requirements should assess city council, boards of health, and/or agency authorities, and address or at least anticipate possible legal challenges. Nevertheless, even in home rule states like Ohio —states in which the state constitution delegates state authority to local governments—cities officials may still face challenges in exercising their authority to enforce healthy housing laws regardless of how well they have prepared their policies, programs or practices to operate within the scope of their authority.

City leadership must consider not only state law/authority, but federal law and the US Constitution when designing healthy housing programs, policies and practices. Stakeholders report landlords, and, to a lesser extent, tenants could challenge certain city rental inspection ordinances on the grounds that they violate Fourth Amendment protections against unreasonable search and seizure and/ or Fifth Amendment protections against selfincrimination. These arguments may be more compelling in cities where ordinances do not permit tenants (and sometimes landlords) to refuse entry to inspect a rental unit and require the city to obtain a costly and time-consuming administrative warrant. When designing a healthy housing program, policy or ordinance city leaders must balance the dual goals of creating an easily administered intervention

and an intervention that can withstand potential constitutional challenges.

LIMITED FINANCING

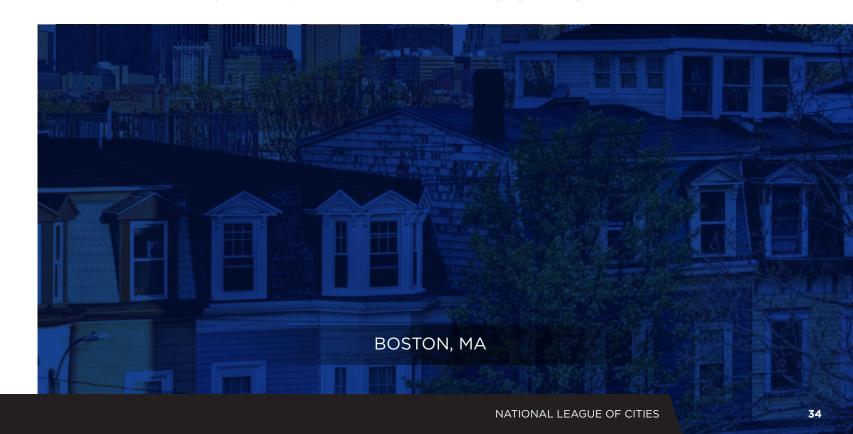
Sustainable financing is crucial to being able to broadly scale and replicate efforts to improve healthy housing. Implementing healthy housing policies, programs or practices is insufficient if there is no money to finance efforts moving forward. It is important for cities to consider more coordinated and sustained efforts by exploring alternative financing approaches including increasing tax revenue (as Cleveland has) and/or ensuring that the program can pay for itself through fees and penalties (as Los Angeles has).

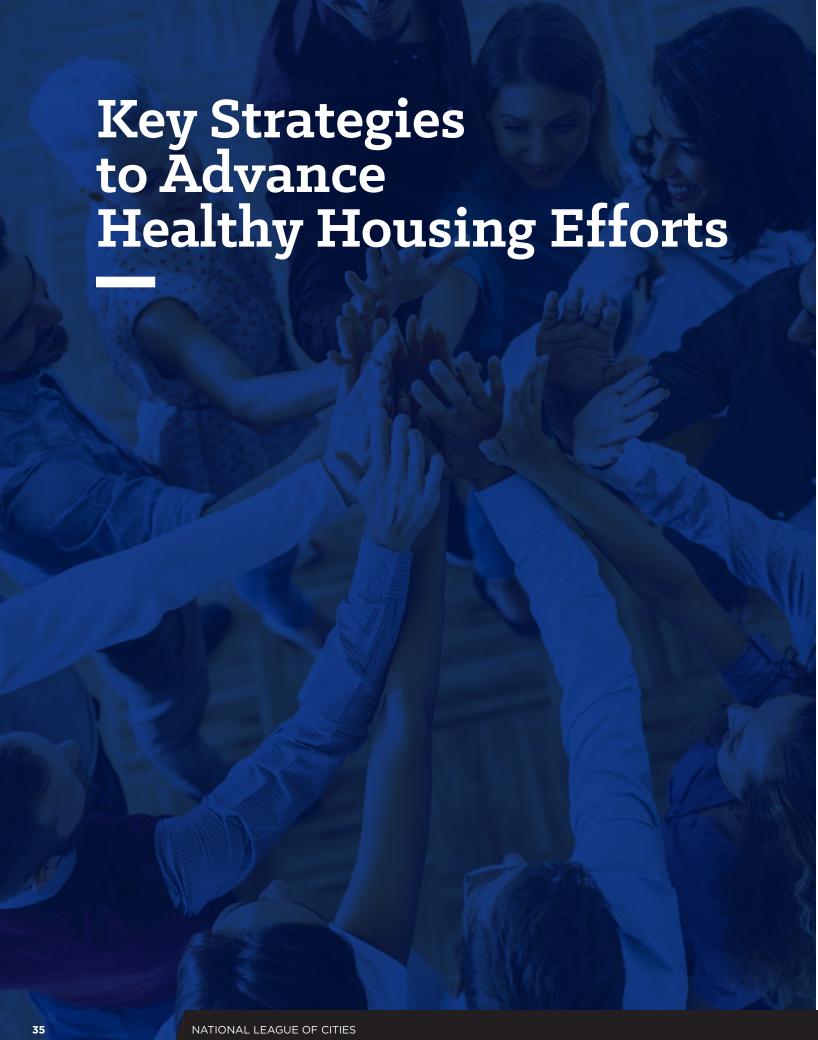
LIMITED DATA

Many cities lack effective mechanisms to capture data, including through their existing inspection programs. Data is important for cities to track and evaluate healthy housing policies; to convince leaders that such policies are necessary and to implement and fund

the program; and to help tenants make the most informed decisions about where to live. Boston at one point made these data available to tenants but has encountered technological issues that have made continuing to offer these data challenging. Other cities may provide lists of all rental units in the city available to tenants but may not go into detail about results of inspections including types of violations identified and compliance rates with orders to address violations.

Even if cities do develop more effective mechanisms to capture data, it is difficult to evaluate strategies across cities because of variability in building codes and standards for rental housing. Discerning the effect of a particular policy, program, or practice can be challenging when the underlying code that they seek to enforce is not consistent from city to city, especially when it is unclear to what extent an improvement in rental housing conditions is based on implementation strategy versus the underlying building code or standard.





City interviewees discussed several strategies they use to overcome these challenges when developing and implementing similar healthy housing policies. Cities can play a role in each of these strategies, at times in a leadership position and at others as a participant in efforts led by other stakeholders.

CONVENER AND COALITION BUILDING

City leaders have a pivotal role in convening key stakeholders to tackle difficult issues and develop action plans.

By convening and building effective coalitions, cities can better engage diverse stakeholders and cultivate champions such as healthcare providers, lawyers, judges, teachers, and social workers who can advocate on behalf of tenants.

City officials may not always take a leading role in creating coalitions for change. However, it is important that cities remain partners to any coalitions and help shape the policy and community agenda.

COMMUNITY ORGANIZING

As with most policy, programmatic, or practice efforts undertaken by governments. community organizing is a fundamental step in realizing change. Community organizing helps prioritize the problem, engage the community, strengthen infrastructure, and expand resources in order to facilitate change. Grassroots efforts to mobilize tenants in their capacities as parents, workers and general members of society put a human face on lead hazards and asthma triggers. While champions such as healthcare providers, social workers and teachers can get the attention of decisionmakers, tenants and community organizers will be particularly motivated because they must return to these conditions every day.

City leaders can play an important role in community organizing, though other parties often take the lead. Through the city's role as a convener, it can facilitate mobilizing action and set the issue of healthy housing at the top of the policy agenda.

FACILITATING ADOPTION

In order for a healthy housing policy, program or practice to be successful, landlords must understand their responsibility in ensuring healthy rental housing. Tenants must also understand what they can and should expect from their landlords and, if their housing does not meet these standards. where they can turn to address housing problems. Finally, the city must offer enough transition time and administrative flexibility to facilitate adoption. Many cities have employed a staggered implementation of their ordinances requiring the highest risk areas come into compliance first, followed by lower risk areas. Some cities are waiving initial registration fees and extending the validity of licenses to encourage adoption.¹¹⁷ Cities that are clear in their communication and flexible in their implementation timelines and requirements will have more success than cities that are rigid and do not make any effort to facilitate adoption.

SUSTAINABLE FUNDING

Many cities are reliant on HUD funding to pay for healthy housing policies, programs and practices. In developing healthy housing initiatives, cities should identify licensing fees, penalties, funding from the city's general fund, and/or other revenue sources that can sustain the program moving forward. In Cleveland, an earlier rental registration system was dormant for years due to lack of funds. In late 2016, Cleveland voters narrowly approved an initiative to increase a city income tax from 2 percent to 2.5 percent. 118 Part of this increase in revenue pays for Cleveland's new rental registration and inspection program.

Similarly, when Los Angeles initially implemented its own rental registration and inspection system, inspections were supposed to occur once every three years. The HCIDLA collected an annual registration fee of \$1 per rental unit from landlords in order to fund this program. However, it quickly became apparent to city administrators that neither the frequency of inspections nor the regulatory fee was sufficient to keep the program running. Now, the city charges a \$43.32 registration fee per rental unit and maintains a Systematic Code Enforcement Fee Trust Fund to collect registration fees (as well as money collected from fines and other penalties) and directs fees toward funding the enforcement of the rental inspection program.¹¹⁹ This fee and penalty structure ensures that the city's program is not subject to modification due to changes in the municipal budget.

Several states have begun exploring the use of Medicaid funds to provide home-based asthma and lead remediation services. 120 In states like New York and Ohio, Medicaid Managed Care Organizations funded environmental assessments to identify lead and asthma hazards. 121 City leaders from those states interviewed for this report did not mention using these funds in such a manner and Medicaid funding for home-based services is still very nascent. Nevertheless, city leaders should explore the possibility of using state Medicaid dollars to fund healthy housing initiatives in their own cities.

PEER-TO-PEER GUIDANCE FROM OTHER CITIES

City leaders should consider reaching out to other jurisdictions directly for further peer-to-peer support as there are lessons learned and models that can be better adapted to address healthy housing issues across municipalities. While there are publicly available peer-reviewed articles concerning the efficacy of healthy housing policies, programs and practices, many of which are included in this report, they are not substitute for guidance city leaders receive through their relationships in other jurisdictions. City leaders may also consider convening conferences with multiple cities.

Of course, city stakeholders must take into consideration the unique challenges their cities face. For instance, in 2009, Benton Harbor, MI enacted an ordinance that was nearly identical to Rochester's rental registration and proactive rental inspection ordinance.¹²² However, Benton Harbor was unable to enforce the provision because the state of Michigan took over the local government under emergency fiscal management in 2010.¹²³ Local control of Benton Harbor was only restored in 2016.¹²⁴ Other cities may discover they face different financial, political-and social challenges that necessitate modification of a city-level program, policy or practice described in this report. Nevertheless, doing this policy surveillance work (whether research, peer-to-peer, or convening based), can provide a solid foundation upon which policymakers can build.

EFFECTIVE USE OF DATA AND EVALUATIONS

City policymakers can use data to answer many different questions and address potential opposition while a policy is under development. Data about how much changes could cost landlords on average may be useful, particularly if these costs are only a small percentage of what they collect for rent. Data or projections on improving health outcomes and the direct and indirect cost savings associated with these improvements (e.g. fewer emergency room and hospital admissions, fewer missed days of work, etc.) can also be compelling for lawmakers, particularly if data is available at the city level. Providing tenants with a database of rentals and violations associated with rentals can help them make more informed decisions about where to live. All of these data require effective technology to ensure ease of collection, use and public access to data.

Evidence surrounding ROI is also an important component of legitimizing health initiatives. It is compelling to say how a rental housing intervention may reduce blood lead levels or symptoms of asthma in children. It can be even more compelling to have data about how these improvements in health outcomes can reduce costs (e.g. fewer emergency room and hospital visits, less missed days of work/school).

Policies should also be evaluated on an ongoing basis. Jurisdictions considering new policies and approaches should

build evaluations into their plans from the beginning to ensure adequate funding to support meaningful assessments. City leaders may consider enlisting a data and evaluation partner such as a university or hospital. In Rochester, the city partnered with the University of Rochester to help with its rental licensing and proactive rental inspection ordinance. 125, 126, 127

As more data and evaluations become available, it will be important for researchers to help translate that evidence into language and formats that are easily understood by lawmakers and other stakeholders. ^{128, 129} One approach to translation would be to building infrastructure to help cities disseminate model policy, programs, and practices through online hubs. These hubs could include model ordinance language that cities could adapt for their own specific needs.

COMPELLING MESSAGING

A common theme among city leaders interviewed was the importance of developing compelling messaging in their efforts to effectively engage a diverse array of stakeholders. Opponents of policy change often raise compelling messages



Several states have begun exploring the use of Medicaid funds to provide home-based asthma and lead remediation services.

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themselves: for example, landlords opposed to such initiatives speak about fear of rising costs, not being able to afford to rent units to tenants, and having to evict tenants if rental units are declared uninhabitable. Those opposed to changes in city government responsibility may talk about increased administrative costs and unwieldy bureaucracy. Both are examples of effective messaging in that they divert attention from a discussion of healthy housing.

Armed with a compelling message about child and adult health, and the data to reinforce it, advocates both within and outside of city government can overcome this opposition. Parents, teachers, and other city residents responsible for taking care of children (i.e. those most significantly impacted by lead poisoning and asthma triggers) can be particularly effective at framing messaging in support of healthy housing initiatives at the city level. In Rochester, Ralph Spezio, principal of Enrico Fermi School No. 17, was an integral stakeholder in developing this kind of compellingmessaging. He was a founding member of the Coalition to Prevent Lead Poisoning when he became aware that a majority of his students with behavioral and cognitive issues suffered from elevated blood lead levels. 130 It was this framing that helped persuade the city to act with its rental registration and proactive inspection ordinance.

Cities may play a role in helping develop this messaging, especially as a convener of the relevant stakeholders described above. Cities are also responsible for elevating the messaging, and thus the issue, in order to build public will for change. They are uniquely positioned to amplify the voices of concerned stakeholders and shift public support toward of healthy housing.

LEVERAGING MEDIA

Effective use of media can inform both landlords and tenants of requirements in rental housing, encouraging tenants to report potential violations and landlords to be proactive in addressing substandard housing conditions. City policymakers can also utilize media to communicate compelling messaging and neutralize opposition. For example, in the lead up to the establishment of Cleveland's new rental registration program, reporters from the Cleveland Plain Dealer wrote about initiatives other cities had implemented to address healthy housing, 131 as well as the challenges Cleveland faced in ensuring the health of its own housing stock, 132 in a series entitled "Toxic Neglect." This information was important in winning over hearts and minds of the community members and city leaders responsible for the tax increase's passage via referendum.

It is particularly important that cities, in their role as leaders of healthy housing initiatives, utilize the media to educate the public on why healthy housing is important and how they plan to address it.



In Closing

The cities profiled in this report

have taken important steps to improve healthy housing by implementing a range of policies that address lead and asthma triggers in homes.

Nevertheless, there is much more work to be done to ensure that all Americans, regardless of their city of residence, have access to housing conditions which enable them to live their healthiest and most fulfilling lives. The challenges and successes described in this report can serve as a starting point to inform other cities' efforts.

APPENDIX A: TAXONOMY OF PROFILED CITIES

CITY	POPULATION (2017 CENSUS ESTIMATE)	POPULATION CHANGE (2010-2017)	MEDIAN HOUSEHOLD INCOME ¹³⁵	PERCENTAGE BELOW 100% POVERTY LEVEL ¹³⁶
Boston, MA	685,094 ¹³⁷	64,392	\$63,621	21.5%
Brooklyn Center, MN	31,006 ¹³⁸	840	NA	NA
Cleveland, OH	385,525 ¹³⁹	-10,453	\$27,551	36.2%
Detroit, MI	673,104 ¹⁴⁰	-37,939	\$28,099	40.3%
Greensboro, NC	290,222 ¹⁴¹	20,641	\$45,064	19.3%
Los Angeles, CA	3,999,759 ¹⁴²	203,699	\$54,432	22.1%
Philadelphia, PA	1,580,863 ¹⁴³	52,592	\$41,449	26.4%
Rochester, NY	208,046 ¹⁴⁴	-2,434	\$31,693	33.5%
Toledo, OH	276,491 ¹⁴⁵	-10,503	\$35,301	27.8%

HOW THE CENSUS BUREAU DETERMINES POVERTY STATUS:

"In determining the poverty status of families and unrelated individuals, the Census Bureau uses thresholds (income cutoffs) arranged in a two-dimensional matrix. The matrix consists of family size (from one person to nine or more people) cross-classified by presence and number of family members under 18 years old (from no children present to eight or more children present). Unrelated individuals and two-person families are further differentiated by age of reference person (householder) (under 65 years old and 65 years old and over).

To determine a person's poverty status, one compares the person's total family income in the last 12 months with the poverty threshold appropriate for that person's family size and composition (see example below). If the total income of that person's family is less than the

threshold appropriate for that family, then the person is considered "below the poverty level," together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person's own income is compared with his or her poverty threshold. The total number of people below the poverty level is the sum of people in families and the number of unrelated individuals with incomes in the last 12 months below the poverty threshold.

Since ACS is a continuous survey, people respond throughout the year. Because the income questions specify a period covering the last 12 months, the appropriate poverty thresholds are determined by multiplying the base-year poverty thresholds (1982) by the average of the monthly inflation factors for the 12 months preceding the data collection." ¹³⁴

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- 14 40 ?g/ft2 for floors or 250 ?g/ft2 for windowsills.
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