



FINAL REPORT

ACCELERATING LEAD REMEDIATION THROUGH FINANCING STRATEGIES

JUNE 17, 2019

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AGENDA

Project Overview

National Context

Landscape Research

Solutions for Philanthropy

Scale & Geography

X PROJECT GOALS AND APPROACH

Goals

- > Consolidate a perspective on the range of mechanisms and programs for financing lead remediation at scale – both those currently in use for lead and those that could be adapted from other sectors
- > Produce a body of knowledge that will enable philanthropic investors and practitioners to productively engage in the work, both regionally and nationally

Approach

- > Pursue secondary research to aggregate all the relevant reports and identify the range of players and efforts focused on lead remediation around the country
- > Conduct ~35 interviews with thought leaders, sector experts, financial agencies and institutions, and practitioners to investigate, characterize and pressure-test strategies
- > Translate the research into a spectrum of opportunities for direct investment and other supporting strategies
- > Develop step-by-step guidance to pursue each of the opportunities

X INTERVIEW PROGRAM

We conducted a total of nearly 40 interviews including both a broad-based interview program and targeted research and case studies

Housing, Community Development & Lead

- > David Jacobs & Jonathan Wilson, *NCHH*
- > Ruth Ann Norton, Wes Stewart & Adriane Harris, *GHHI*
- > Carey Shea, *Home by Hand*
- > Rebecca Morley, *Consultant/RWJF*
- > Elizabeth Richards, *Enterprise*
- > Soni Gupta, *Home Funders and The Boston Foundation*
- > Don Bianchi, *MACDC*
- > Allison Clark, *MacArthur Foundation*
- > Megan Mulcahy, *MA Housing Partnership*
- > Deanna Ramsden, *MassHousing*
- > Katrina Korfmacher, *Rochester*
- > Rebecca Regan, Mark Lederhos, Richard Kingston, *Housing Partnerships Network*

Energy

- > Anne Evens, *Elevate Energy*
- > Whit Faulconer, *JPB*
- > Justin Tyrell, *Indiana Community Action Association*

Water

- > Tom Neltner, *LSLRC*
- > Becky Scott & Nicole Mathews, *WI SDWLP*
- > Tom Liu, *BAML (former EFAB)*

Health / Anchors

- > Ben Anderson, *Children's Defense Fund*
- > Danielle Price, *University Hospitals (Cleveland)*
- > Autumn Glover, *Ohio State University Medical Center*

Finance / CDFIs

- > Desiree Sideroff, *Craft 3*
- > Nick Auten, *Self Help*
- > Stacie Young, *CIC*
- > Michelle Volpe, *BlueHub*
- > Kimberly Latimer-Nelligan, *LIIF*
- > Shai Lauros, *LISC*
- > Krysta Pate, *CRF*

Philanthropy

- > Cara Matteliano, *CFGB*
- > David Fukuzawa, *Kresge – Health & Human Services*
- > Wendy Jackson, *Kresge – Detroit*
- > Giridhar Mallya, *RWJF*

Land Trusts

- > Tony Pickett, *Grounded Solutions Network*
- > Roger Lewis, *Elevation Land Trust*

X AGENDA

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X LEAD RISK MAGNITUDE & GEOGRAPHY (1 OF 2)

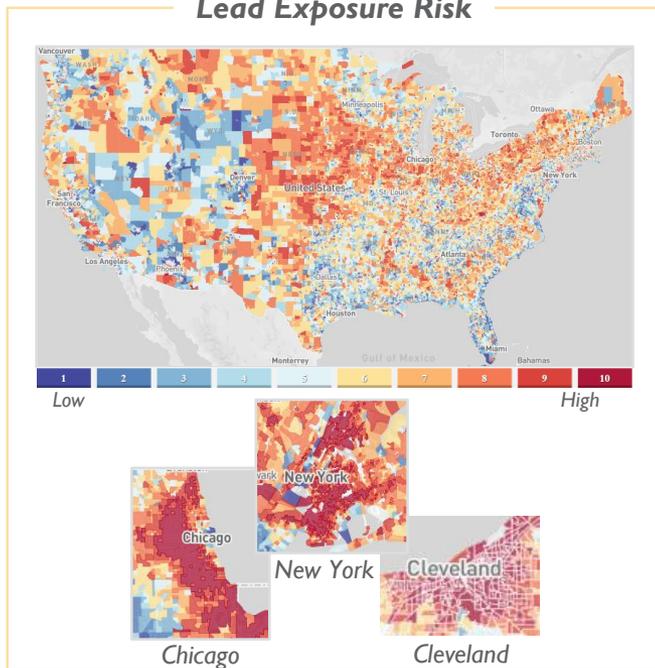
Lead poisoning is a national problem, but it disproportionately affects certain geographies

Key Facts

- > Nearly 1/3 of U.S. homes contain lead paint, translating to 37M homes nationally
- > Of those, 24M have significant paint hazards, and ~3.6M house young children
- > Up to an estimated 10M homes have lead service lines (LSLs)
- > Over 535K children in the U.S. have elevated blood lead levels

Where is the problem concentrated?

Lead Exposure Risk



- > Older, large urban areas – particularly in the Northeast – have especially high risk of lead exposure
 - In cities like New York and Chicago, one in five census tracts have the maximum lead exposure risk rating
- > Smaller metro areas in the Rust Belt also tend to be at high risk
 - Over 30% of census tracts in Cleveland & Milwaukee and over 40% of tracts in Utica, NY have high risk
- > Widespread contamination of water in Flint, MI and Washington, DC have brought recent media attention to lead in drinking water
- > Some rural areas, particularly in the Midwest, are also at high risk of exposure
 - For example, 92% of rural census tracts in Nebraska have high risk
- > Younger metro areas (e.g., Los Angeles) and the West tend to have lower risk of lead exposure

Sources: Vox/Washington State Dept. of Health National Lead Exposure Risk Map (2016); American Healthy Homes Survey (2005-6), CDC, EPA

Note: The most recent HUD American Healthy Homes Survey – upon which most of the facts above and in other reports on lead poisoning draw – is based on data collected in 2005-6

X LEAD RISK MAGNITUDE & GEOGRAPHY (2 OF 2)

Lead poisoning risk also varies by source, household demographics, and building type, with unique challenges by region

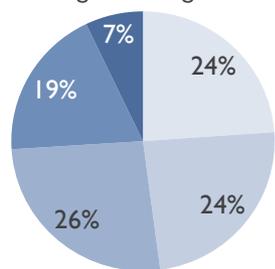
Whom does the problem primarily affect?

Overview

- > The most recent American Healthy Homes Survey (2005-6) reports:
 - Single-family homes are at higher risk than multifamily (25% vs. 7%); similar challenges in small (<4 unit) properties
 - Low-income households are at higher risk than higher-income households (29% vs. 18%)
 - Housing without government subsidies is at higher risk than government-supported housing (22% vs. 12%)
 - Black households are at higher risk than white households (28% vs. 20%)
- > According to the CDC, “although there are several exposure sources, lead-based paint is the most widespread and dangerous high-dose source of lead exposure for young children”
 - In some places (e.g., Kent County, MI), lead dust is the cause of 90% of lead poisoning cases
 - The Council on Environmental Health notes that windows are a greater source of lead dust than floors
 - EPA estimates drinking water accounts for ≥20% of lead exposure; in formula-fed infants, can reach 40-60%

Chicago

Chicago Housing Stock

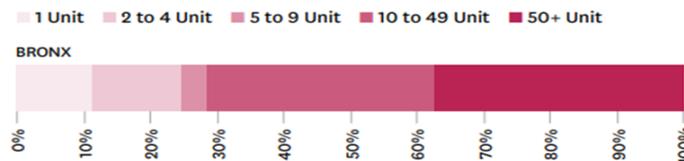


Single-family 1-unit 2-4 units 5-49 units 50+ units

- > Chicago’s housing stock is predominantly comprised of buildings with <4 units (74%)
- > In some of the poorest neighborhoods, the proportion of small multifamily units (2-4 units) is significantly higher than in the city overall (e.g., 49% in South Chicago, 65% in West Garfield)

New York

Bronx Housing Stock



- > In the Bronx only ~11% of homes are single-unit and ~14% are in 2-4 unit buildings
- > Largest housing segments are larger multi-family buildings (70% are 5+ units; nearly 40% are 50+ units)

Sources: American Healthy Homes Survey (2005-6); DePaul University Institute for Housing Studies’ Cook County Housing Stock Map; NYC Furman Center’s 2017 Changes in NYC Housing Stock Report; EPA Basic Information About Lead in Drinking Water; Kent County Lead Task Force’s Ending Child Lead Exposure in Kent County (2018); CDC; Council on Environmental Health’s Prevention of Childhood Lead Toxicity (2016)

X FEDERAL REGULATIONS

While there are several federal statutes and regulations regarding lead in homes, they tend to be limited in scope and can be under-enforced; the most recent [*Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*](#) in late 2018 offered little new policy or funding

Point of Intervention	Statute/Regulation
Sale / Purchase	Residential Lead-based Paint Hazard Reduction Act <ul style="list-style-type: none">> Requires property owners / landlords to disclose to buyers / tenants the presence of any known lead-based paint> However, <u>does not require owners to test</u> properties for lead (owners can “check a box” indicating they do not know of any lead hazards)> Covers only paint-based hazards and <u>does not cover lead pipes</u>
Renovation	EPA Renovation, Repair, and Painting (RRP) Rule <ul style="list-style-type: none">> Requires that all “firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices;” projects are <u>not designed to permanently eliminate lead hazards</u>> The RRP is highly <u>under-enforced</u>, due to low priority and understaffing at multiple levels of government<ul style="list-style-type: none">– NCHH reports that, in 2015, enforcement was so lax that the average contractor working on 5 projects per week could go 57 years before facing an EPA inspector
Ongoing / Routine	HUD Lead-Safe Housing Rule: Applies to all <u>federally-assisted housing</u> , but has varying requirements depending on level/nature of assistance <ul style="list-style-type: none">> Federally-supported public housing built before 1978 must undergo lead paint abatement> Housing units receiving >\$25K in federal rehabilitation assistance must abate lead paint hazards; those receiving \$5K-\$25K must do interim controls and ongoing maintenance; those receiving up to \$5K must test/repair damaged paint Clean Water & Air Act and the Lead and Copper Rule , which govern clean water and lead in drinking water <ul style="list-style-type: none">> LCR requires water utilities to conduct tap sampling for lead; revisions under consideration to require stronger enforcement

X STATE/LOCAL REGULATIONS

Many states and some cities have their own lead laws, but are largely reactive and do not focus on primary prevention; a few states and cities have particularly strong, preventative regulations

Nearly all states and several cities have laws about residential lead hazards, in addition to federal regulations

- > According to the National Conference of State Legislatures, as of 2017, 44 states had adopted laws to address lead hazards, primarily in paint and dust
 - States without laws tend to be more sparsely-populated and/or in the western U.S., which – on average – tends to be a lower-risk area for lead hazards
- > Some cities have lead laws / ordinances as well – particularly in areas that have been especially hard-hit by lead poisoning, including lead hazard assessment laws for rental units in New York City, Philadelphia, Burlington, and Washington D.C.

However, most such laws are only triggered after an elevated blood lead level case has been reported

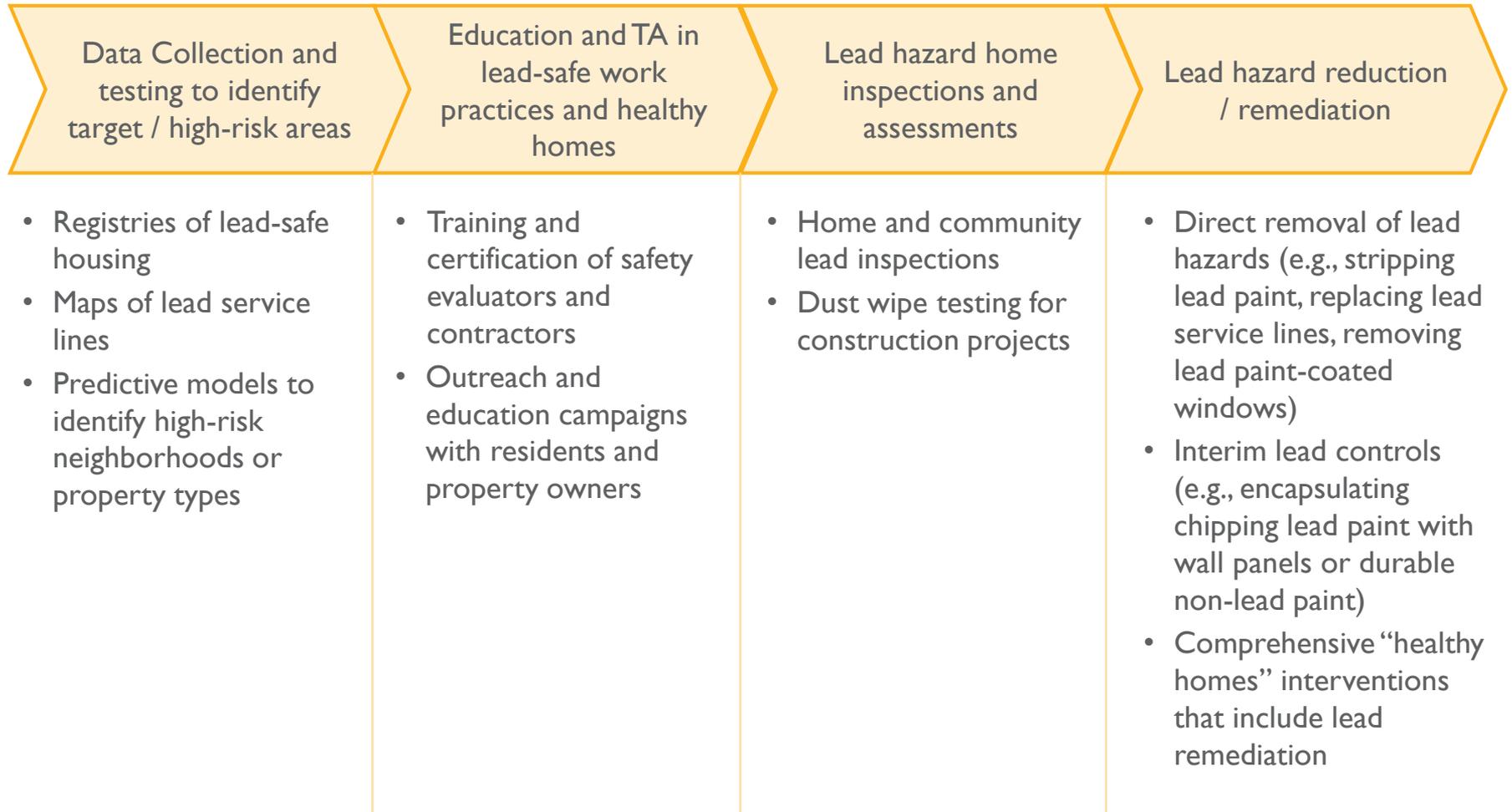
- > In some cases, families with child EBLs are moved to another lead-safe unit, but the original lead hazard in the first unit remains; notable exceptions that address hazards prior to exposure include regulations in MD, MA, RI, DC

Several states and cities stand out as leaders in moving toward more preventative regulation

- > Rochester, NY
 - Requires visual inspection of all properties built before 1978 to identify any peeling paint hazards before city will issue or renew Certificate of Occupancy; properties in designated high-risk areas also undergo dust-wipe tests
 - Properties with identified lead hazards must use certified contractors for interim controls (or full abatement) and clearance
- > Maryland
 - Burden is on the property owner who must (re)register their units with the state Dept. of the Environment every year and pass an inspection for lead dust and damaged lead paint before every change in occupancy
 - Property owners with identified lead hazards must use certified contractors to meet risk reduction standards
- > Massachusetts
 - Requires de-leading upon acquisition of a building; normalized as “part of the financing”

X SPECTRUM OF LEAD REMEDIATION ACTIVITIES

Lead safety efforts range from indirect activities like data collection to the direct remediation of lead



X TWO STANDARDS OF INTERVENTION: “LEAD SAFE” VS. “LEAD FREE”

There are two tiers of lead removal based on the intervention approach and duration of impact; while some organizations prefer the security of permanently removing lead, many players focus on lower-cost, more limited measures

	“Lead Safe”	“Lead Free”
Key Terms	<ul style="list-style-type: none"> • “Interim controls” • “Patching” • “Encapsulation” of paint, using a special durable coating 	<ul style="list-style-type: none"> • “Abatement” or “Remediation” • “De-leading” • “Full removal”
Definition	<ul style="list-style-type: none"> • No presence of peeling lead paint or dust in the home; high-risk issues addressed • Consistent with EPA’s RRP standards 	<ul style="list-style-type: none"> • Permanent elimination of lead paint or water hazards through full replacement of lead paint, dust, and water lines/fixtures
Rationale	<p>Lower cost relative to full abatement</p> <ul style="list-style-type: none"> • Greater chance of homeowners participating (“Standard is lower, but compliance is higher”) • However, may need to be repeated after several years if conditions deteriorate again 	<p>Fully eliminates the hazard and avoids need for future repair</p> <ul style="list-style-type: none"> • In addition, some financing vehicles (e.g., loans) lend themselves to full abatement
Examples	<p>Paint</p> <ul style="list-style-type: none"> • Rochester, one of the lead paint success stories of the country, enforces <i>lead safety</i> in all rental units (e.g., houses must pass an interior inspection for deteriorated paint) • Cleveland is also currently focused on lead-safety: “Nobody here thinks the HUD model of \$10-12k a unit is remotely possible or necessary” <p>Water: Interim controls include filters on taps and adding orthophosphates</p>	<p>Paint: The MA Get the Lead Out program involves de-leading a property, which requires use of state licensed lead paint inspectors</p> <p>Water: With Lead Service Lines (LSLs), the only option is full line replacement, including both mains and private lines (partial replacement does not mitigate the health risk)</p>

X COST AND BENEFIT OF INTERVENTION

The burden of lead poisoning is significant – both from direct health-related expenses and long-term education, workforce, and criminal justice outcomes; the cost of wide-scale remediation is massive – though at an individual property level is discrete and potentially “investable”

Savings from Lead Removal

- > Lead exposure-related cognitive impairments cost an estimated **\$51B annually in lost US economic productivity** (includes higher rates of diminished reading and learning abilities, school dropout rates, aggressive behavior, and health impacts)
- > A 2017 Pew report noted significant potential return on investment for removal of lead hazards in homes:
 - **Removing lead paint hazards** from pre-1960 homes of children born in 2018 into low-income households would yield **\$1.39 in benefits per \$1 invested** through health and education savings and increased tax revenue
 - **Removing lead service lines** from these homes would yield **\$1.33 of benefits per \$1 invested**

Intervention Costs

- > Estimates to safely **remove lead paint in homes with significant lead hazards reach \$168B** and \$260B for all homes built pre-1978; for a single property:
 - \$2-3K for lead-safe
 - \$10-12K for lead-free
- > To replace all **lead water service lines is estimated at \$33-275B** nationally
 - \$3-7K per private/property-specific line
 - Municipalities: Lansing MI spent \$45M to replace >12K LSLs; Massachusetts Water Resource Authority distributed \$7.5M to six communities for LSL replacement
- > Soil: \$2,800 per yard

Sources: NIH/PubMed: *An Update on Childhood Lead Poisoning*; GHHS's *Strategic Plan to End Lead Poisoning*; NCHH's *Find It, Fix It, Fund It: A Lead Elimination Action Drive (2017)*; Delta Institute's *Creative Funding Strategies for Remediation of Lead & Other Health Housing Hazards (2009)*; American Water Works; Fitch Ratings; Sherry Dixon et al *The effectiveness of low-cost soil treatments to reduce soil and dust lead hazards (2006)*; Vox: *"Hillary Clinton's big, important promise to end lead poisoning in America, explained" (2016)*

X FUNDING SOURCES

Existing funding sources come primarily through federal programs, along with targeted activity in the private and philanthropic sectors

Federal

- > Largest funders of lead paint hazard remediation are HUD and EPA
 - HUD’s primary grant program is nationwide, primarily needs-based, and has historically funded more in the NE and Midwest; key requirements (e.g., no lien or tax arrears) can be too onerous for many homeowners
 - CDBG and HOME grants: Core elements of HUD’s community development efforts, with CDBG used flexibly across a range of community needs and HOME centered on affordable housing; HOME has been funded at lower levels in recent years
 - EPA funds LSL replacement, primarily through the Drinking Water State Revolving Fund (DWSRF) and Water Infrastructure Financing Improvement Act (WIFIA)

State & Local

- > States typically fund lead programs by leveraging federal dollars (listed above, plus Medicaid), issuing state bonds, offering tax credits, charging fees (eg, surcharges on professional real estate licenses), and by working in multi-stakeholder collaboratives (e.g., with community lenders, housing agencies)

Utilities

- > Utilities typically leverage outside funding (municipalities, CDFIs) or charge ratepayers via energy bills

Philanthropy

- > Philanthropies of various sizes (local/community, regional, national), and with a range of sector focus (health, housing, education, children, energy) are actively funding lead-related organizations and programs, often at the local level

Banks / Corporate

- > CDFIs and private lenders finance repair projects and may offer special loans in connection with a municipality or philanthropy
- > Corporations may fund projects (Supplemental Environmental Projects or “SEPs”) as a settlement agreement for failure to comply with an environmental law (e.g., Clean Water and Air Act) that funds a project with environmental or public health benefits in the affected community

X AGENDA

Project Overview

National Context

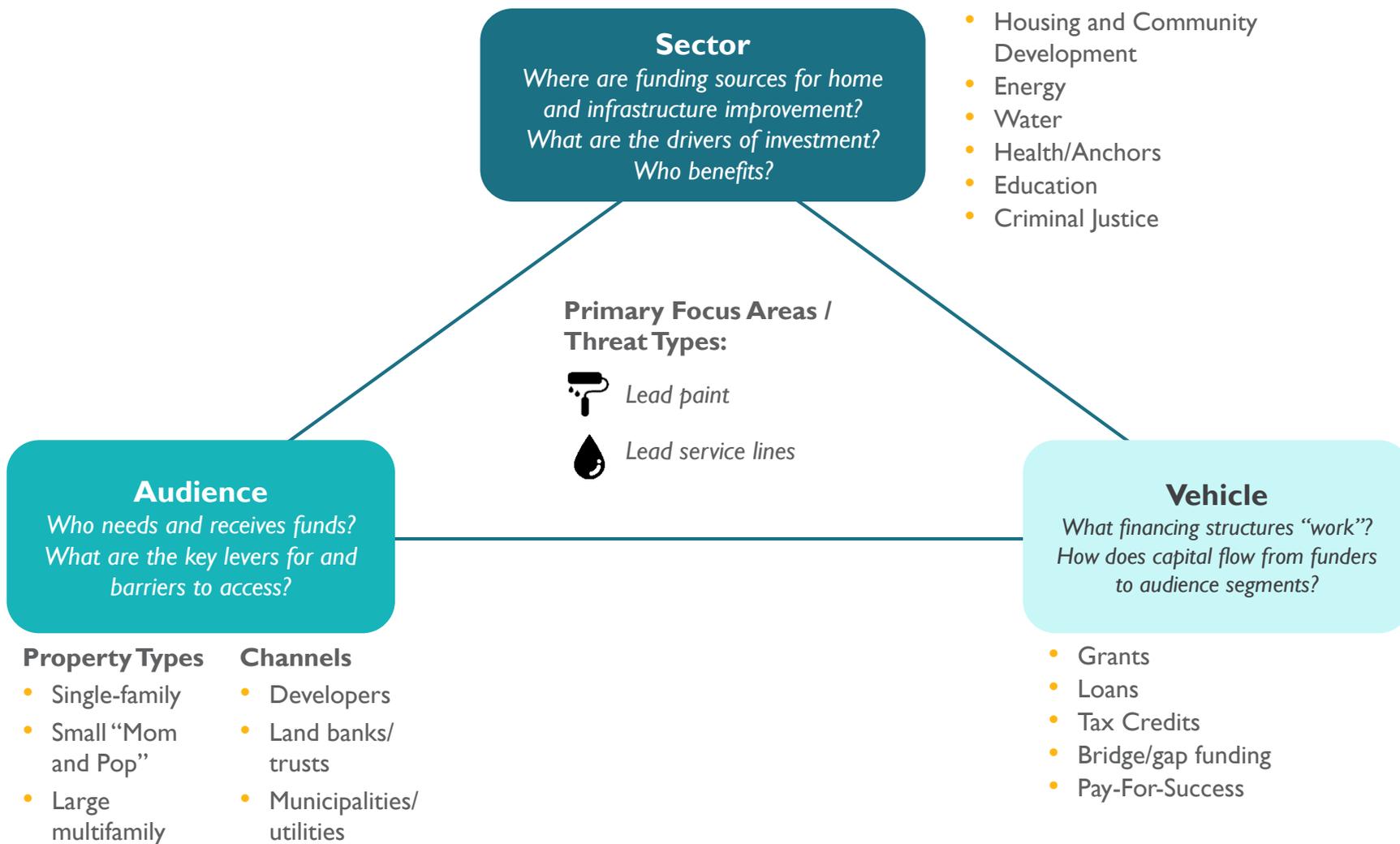
Landscape Research

Solutions for Philanthropy

Scale & Geography

X MAPPING THE LANDSCAPE

Interventions and financing strategies for lead remediation stretch across multiple sectors, audiences, and vehicles; our solutions emerge from various combinations of these levers



X LANDSCAPE RESEARCH: KEY SECTORS

There are four primary sectors involved in funding and facilitating lead-remediation activities

Sector	Overview
 Housing	<ul style="list-style-type: none">• Core housing types affected by lead include single-family homes, “mom and pop” (2-4 unit properties), and large, multi-families• There are several points during a property ownership “lifecycle” for lead remediation including acquisition and redevelopment, refinancing and renovation
 Energy / Weatherization	<ul style="list-style-type: none">• Energy efficiency activities—primarily window replacement—can indirectly (or unintentionally) create lead safe housing
 Water	<ul style="list-style-type: none">• Replacing lead service lines that supply water to homes is the key to reducing lead exposure in drinking water• Ideal to replace the entire system (mains and private supply lines) in a neighborhood at once, as partial replacement does not reduce risk
 Health & Health Anchors	<ul style="list-style-type: none">• Medicaid has always paid for a large portion of lead-related health costs, and is increasingly being pulled into remediation work through special waiver and flexible funding programs• Anchors are beginning to be more open to community development investments as they embrace social determinants in their core service lines and gain increased flexibility from the IRS in community benefits



X HOUSING: OVERVIEW – HOUSING TYPES

While there are commonalities in financing across all housing types, there are unique financing opportunities and challenges within each

Housing Type	Financing Considerations
Single-Family	<ul style="list-style-type: none"> • Typically utilize bank loans or federal FHA loans <ul style="list-style-type: none"> – All require good credit and threshold debt-to-income ratios – Loans have a cap on loan-to-value ratio – Most backed by Fannie Mae/Freddie Mac • Limited flexible funding or incentives to invest in property <ul style="list-style-type: none"> – Absence of tax credits; nonprofit lenders generally focused on larger projects – Special programs and incentives target larger multi-family projects • Properties in lower value markets challenged with “appraisal gap” making it difficult to invest in a property with available equity
“Mom and Pop” properties (2-5 units)	<ul style="list-style-type: none"> • Similar challenges as single-family • As landlords, many unaware of hazards or potential solutions unless there is local regulation • Many operate with thin margins and limited ability to raise rents to service a loan; in low-income communities, are often higher-risk borrowers with limited debt capacity • Other home repairs typically take precedence, including interior renovations and urgent items such as roof and HVAC; energy efficiency can be attractive if high and quick ROI
Large multi-family (6+ units) – subsidized/federally financed	<ul style="list-style-type: none"> • Most CDFIs finance many of these deals • Financing typically requires compliance with lead testing and remediation protocols; incorporate lead remediation into the financing package
Large multi-family (6+ units) – naturally occurring/ unsubsidized	<ul style="list-style-type: none"> • Similar to “Mom and Pop” • Potentially easier to finance than smaller properties due to scale, better credit/bankability among owners, and use of grant/other incentive programs • Only a small number of CDFIs also finance these projects (CIC/Chicago; CPC/NY)

*“There are a lot of resources for 6+ unit buildings, but very few for 1-4”
– Nonprofit lender*

X HOUSING: OVERVIEW – INTERMEDIARIES



In addition to property owners in each segment, there are a range of intermediaries who play a role in carrying out lead remediation

Housing Type	Financing Considerations
For-profit developers	<ul style="list-style-type: none">• Will optimize project scope and investment to maximize value and ensure livability of property; can be challenging economics in low-income communities
Non-profit developers	<ul style="list-style-type: none">• CDCs and other nonprofits are typically small organizations operating at a local level that are challenged to secure capital and create change at scale• Existing capital and subsidy sources typically leave a gap in the financing of lead remediation work; key sources of supplemental funding are local and vary by state/city<ul style="list-style-type: none">– Utilize tax credits and other federal subsidies– May draw on locally disbursed federal grants, philanthropic capital• May struggle to align funding availability with timing of capital need• Significant coordination often required for complex “capital stacks” and community partnerships
Land Trusts / Land Banks	<ul style="list-style-type: none">• Requires significant up front capital investment through private or philanthropic capital• Homeowners may require ongoing assistance from stewardship role of Community Land Trust (CLT); funding from homeowner fees (e.g., as a revolving loan fund)• Relevant products (e.g., Fannie/Freddie CLT mortgages as part of “Duty to Serve”) may not permit inclusion of lead remediation funding• Most CLTs are hyper-local; larger/multi-site CLTs are emerging (e.g., Elevation/CO)
Municipalities (Utilities /Water Authorities)	<ul style="list-style-type: none">• Need for coordination between both public and private sides of Lead Service Lines• Competing priorities relating to areas of investment and how to use ratepayer financing

X HOUSING: OVERVIEW (1/2)



- > **Lead hazards in affordable housing are concentrated in single-family and small multi-family (<6 unit) properties, as well as larger multi-family properties that are “naturally occurring” and not subsidized through federal programs**
 - Federal regulations address the large proportion of multi-family affordable housing through lead testing and remediation requirements, including most of what is financed by CDFIs
 - However lack of enforcement of the RRP standards suggests that a broader push may have value – to reset consumer and contractor expectations for meeting the “dust wipe test” on projects
 - The economics for remediation in smaller and unsubsidized properties are challenging
 - Owners may not be eligible for federal grants due to tax arrears if payments are delinquent
 - Adding investment or expense to a property with low rents and thin margins is not possible, with some geographies particularly challenged with low property values and low/no home equity available; includes cities such as Detroit and Rochester/Buffalo
 - Single-family homes receiving HUD mortgage insurance are not regulated
 - Less-dense rural areas are also challenged with a higher concentration of single-family and smaller properties
 - Even in places with regulation there is still avoidance where possible, e.g., Boston
- > **Grant programs can remediate hard-to-finance homes**
 - Federal subsidies often distributed by states as <\$15K grants
 - However these funds are limited and agencies typically prioritize homes with reported EBLs rather than for prevention
- > **With the right structure, there is potential to finance lead remediation at both property acquisition and refinancing**
 - A second mortgage is typically required to do so at acquisition; because many lenders would not take a subordinated position, especially in a transaction with limited equity, community/concessionary lenders and flexible capital are needed

“The economics of ‘naturally occurring affordable housing’ (NOAH) are challenging – if the properties are not in a tax credit program, you need another source of equity” – CDFI

*“It is easier to combine lead with other home renovations the property owner wants to do.”
– Expert Consultant*

*“Many rental agents tell renters with children only about new construction or deleaded units, which severely limits the options to families with kids and is against the law”
– Boston Globe (2018)*



X HOUSING: OVERVIEW (2/2)

- The loan terms need to be affordable for and payable by the property owner
 - Typical rates of 4-8% and traditional lending caps of 80% LTV will generally not work
 - Loans are most easily payable when they line up with the primary mortgage (20+ years) and can be taken out/refinanced at once rather than paid back in full out of operations
 - Including lead at a refinancing can allow the property owner to bring together various funding sources and leverage favorable terms/built-up equity
 - In markets with a large “appraisal gap” deals may require credit enhancement/subsidy to finance the cost of lead remediation, e.g., Detroit Home Mortgage and Rehabbed & Ready programs
- > **Currently, the focus on upgrading and preserving affordable housing provides an opportunity to incorporate lead into financing structures**
- The CDFI Fund is providing >\$100M annually of flexible capital to CDFIs and nonprofit lenders through the Capital Magnet Fund
 - Local programs such as the Bay Area Preservation Pilot (BAPP) are using similar structures to encourage developers to preserve use restrictions through subsidized financing
 - Local nonprofit housing organizations work to braid multiple funding sources for housing rehab, including housing, energy efficiency and LSL replacement and could potentially add lead to this work
- > **There are additional strategies to consider**
- Because “the squeaky wheel gets the grease,” communities with less severe needs but simpler funding opportunities may get the benefit of limited funding; there is potential to promulgate better data and advocate for attention to needier communities
 - Includes requiring protective measures for low income tenants who face the burden of the lead problem but also may face retaliation from landlords and/or displacement during abatement
 - Cities such as Rochester, and states such as MD and MA, have shown that regulation makes a major difference in lead activity; potential to advocate for broader adoption of these rules – and then provide financing needed for compliance
 - Shortages of certified contractors reported in many places with lead financing, which could be addressed through increased awareness and training
 - The proposed Neighborhood Homes Investment Act (NHIA) would create a new tax credit-funded equity pool to invest in single-family homes with federal lead requirements

“Maybe you could create a program where developers get even lower rates or additional money by requiring lead abatement.”
– CDFI

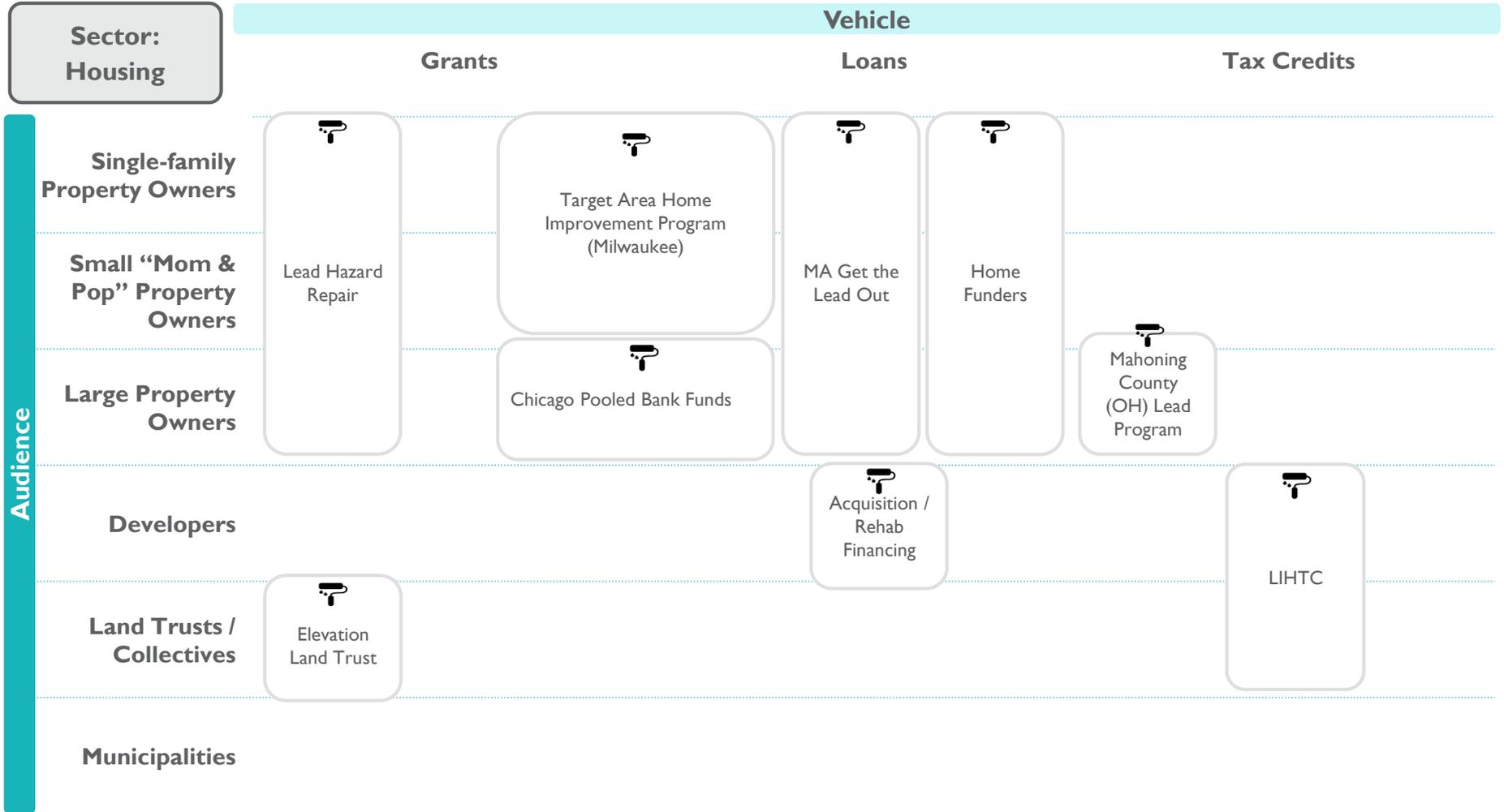
“I don’t think you’ll ever have a fully comprehensive approach where you braid together all sources of funding to address all lead risks in homes, but you also can’t operate in silos.”
– Foundation

“I wish we had done more work in data aggregation earlier – it is critical for targeting our direct investments”
– Foundation



X HOUSING: MAPPING FINANCING VEHICLES

(non-exhaustive)



Audience



MassHousing's Get the Lead Out Program

Target Audience / Location	1- to 4-family homes in Massachusetts
Funding Mechanism(s)	Deferred loans
Funding Source(s)	Began with funding from legal settlement; then from state; then repayments & periodic recap.

Overview:

- > MassHousing – the state's Housing Finance Agency – runs GTLO, in partnership with the Depts. of Public Health & Community Development
- > The program was initially funded using proceeds from a legal settlement, until advocates convinced the State of Massachusetts to allocate funding for it in 1997
 - When state funding ended in 2002, GTLO began relying on loan reflows to sustain itself (which had previously gone to the state)
- > GTLO offers owner-occupants a 0% deferred loan to be repaid upon sale or refinancing of property; the loan functions as a lien on the property and must be used exclusively for lead paint abatement
- > Investor-owners renting to low-income tenants can access 3% fully-amortizing 5- to 15-year loans, but the vast majority of loan recipients are owner-occupants
- > GLTO relies on local rehabilitation agencies and lending partner institutions for origination; local rehabilitation agencies help borrowers prepare their applications, which are then submitted to the lenders who underwrite and approve the loans
 - GTLO pays \$1,000 to each lender and \$1,500 to each local rehabilitation agency for origination
- > Customers “come because they have to, not because they want to” – historically, the program has been primarily targeted toward people who are court-ordered to address lead in their homes and have child(ren) in case management
- > The 0% deferred loans see high demand, with funds “flying out the door”
 - In the past, GTLO struggled to deploy funds because the administrative burden on lenders was prohibitive; 2016 changes (e.g., having designated pool of money to cover closing costs and fees, eliminating closing costs and fees for 0% loan recipients) made it easier for lenders to participate in the program and led to greater deployment
- > The program made 100 loans in FY 2018, but will soon need to be recapitalized

Key Takeaways

0% deferred loans can help overcome low-income property owners' barriers to take on debt; mixing the “carrot” of 0% capital with regulatory “sticks” can result in high uptake for lead remediation financing



Detroit Home Mortgage

Target Audience / Location	Homeowners in Detroit
Funding Mechanism(s)	Second mortgage
Funding Source(s)	Loan fund via investing financial institutions

Overview:

- > Launched in 2016 with the aim to increase home ownership in Detroit while addressing appraisal gap challenges
- > DHM offers a second mortgage product to fund the rehabilitation of single-family properties by offering up to \$75K above the appraised value (not tied to a particular LTV); this figure was determined through research into the anticipated costs of repairs relative to appraisal
- > Maximum 20-year loan term; virtually all loans are affordable to families at 70% of AMI and above, many affordable for families at 50%+ AMI; offered to borrowers with >620 FICO score
- > Participants required to attend mandatory, free homebuyer education, which has contributed to strong repayment rates; there is also a “hardship forgiveness” option for homeowners who can show a major hardship and are not able to repay; philanthropic funds are used to cover these losses
- > Designated project manager scopes work, vets contractors, and advocates for homeowners
- > Goal to serve ~1,100 homes over 3-5 years; the program closed 228 mortgages between 2016 and early 2019
- > 5 banks (e.g., Huntington, Liberty) originate first and second mortgages; CRF (a CDFI) holds and services second mortgages
- > DHM has multiple funders:
 - CRF capitalizes the second mortgages
 - MI State Housing Dev. Authority (subsidy funding to support borrower rate buy-down; \$6M over 4 years)
 - Kresge (PRI for borrower equity protection, credit enhancement, and programmatic grants to CRF)
 - Ford Foundation (programmatic grant support for CRF operating costs)
 - Financial institution investors (\$43M in capital for loan fund)

Key Takeaways

Creative coordination and combination of funds across a range of stakeholders can enable renovation of properties in low-income communities



Rehabbed & Ready

Target Audience / Location	Single-family homes in Detroit
Funding Mechanism(s)	Grants (mostly to finance rehabilitation before property sale)
Funding Source(s)	Financial institution, private company

Overview:

- > Rehabbed & Ready – a collaborative effort between the Detroit Land Bank Authority, Home Depot, and Quicken Loans – works to increase occupancy of vacant properties, while addressing the appraisal gap, by rehabilitating properties before they are sold
- > Renovations include (but not limited to) health and safety measures like removing hazards like asbestos, upgrading plumbing and electrical systems, installing high-efficiency heaters, replacing roofs, etc.
- > The program has several partners:
 - The Detroit Land Bank Authority, which owns ~25,000 vacant houses, designates properties in its portfolio
 - Home Depot renovates the properties and provides \$1,500 for appliances
 - Quicken Loans provided a \$5M grant in 2015 to finance the renovations and also provides pre-approved mortgages to families interested in purchasing the properties; part of Rock Ventures' (its parent holding company's) investment in revitalizing its hometown of Detroit
 - Kresge made a \$200K grant to cover any shortfalls in selling price
- > Have completed ~70 homes since 2015 (as of early 2019), but have lost ~ \$21K per home, so will require additional funding if it is to continue; Kresge considering shifting the model moving ahead

Key Takeaways

Private companies, alongside philanthropy, can play a role in providing capital and grants/in-kind for home repair programs

Land banks willing to work creatively and closely to address home health and safety



Mass Housing Partnership's Perm Plus

Target Audience / Location	Developers of multi-family affordable housing (MA)
Funding Mechanism(s)	Deferred second mortgage
Funding Source(s)	Banks

Overview:

- > MHP is a public, nonprofit housing organization whose mission is to increase the availability of affordable housing in MA through mortgages and other lending
- > MHP received an inflow of funds for this lending program from a 1990 state law that required banks to give MHP long-term lines of credit
- > Perm Plus is a deferred second mortgage product that MHP offered in the 2000s, until funding ran out
 - Perm Plus offered 0% deferred payment to developers to assist them in purchasing and making repairs and renovations – including lead remediation – in affordable, multi-family (5+ unit) buildings
 - Loans could be for up to \$60,000 per unit (or \$75,000 for non-profit developers) up to ~\$300,000-400,000 per property
- > MHP deployed loans with a 20-year term to match repayment of the mortgage (and needed to return a portion of 10-year capital that they were not able to use); when the 20 years is up, if a property owner commits to maintain affordability, the loan can be reinvested in the property for another period – this means that although the capital remains a loan, it functions more like a grant over a long period of time

Key Takeaways

0% deferred second mortgages can be a viable incentive for developers to carry out lead remediation, and capital can be deployed quickly

X HOUSING: ADDITIONAL CASE STUDIES (1/5)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
NHIA bill	N/A	N/A		<ul style="list-style-type: none"> Bill that 'acts as LIHTC' for single-family homes (modeled on LIHTC and NMTC) The proposal would amend current law to permit states to exchange private activity bond cap for tax incentives under a similar formula (similar to how states currently can exchange a portion of their private activity bond cap for mortgage credit certificates). 	<ul style="list-style-type: none"> Could create a more level playing field with multifamily and help overcome hurdles that smaller units face Helps to break the appraisal gap cycle by bringing in new equity to deals
Alameda County Community Development Agency	SF / Bay area, CA	HUD Lead Hazard Repair	Grants	<ul style="list-style-type: none"> Up to \$10,000 grants provided for family housing for lead inspections and abatement 	<ul style="list-style-type: none"> Funding went to the Alameda County Community Development Agency (Healthy Homes Dept), not health dept Free RRP training in lead-safe work practices provided for maintenance crews; waived certification fee
Detroit Lead Housing Database	Detroit, MI	HUD & Kresge Foundation	Grants	<ul style="list-style-type: none"> Researcher at Wayne State University created a database to map lead status of homes in Detroit Lists addresses where reports, inspections or other healthy homes work has been done; recently been expanded to include maps illustrating where healthy homes-related incidents are higher and lower at zip code and census tract levels. The database also collects, stores and manages data related to Green and Healthy Homes projects across multiple sites; the data is updated when new information is available and all partners are linked electronically 	<ul style="list-style-type: none"> Allowed full mapping of Detroit homes

X HOUSING: ADDITIONAL CASE STUDIES (2/5)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Community Preservation Corporation	NYC	N/A	N/A	<ul style="list-style-type: none"> Established in 1974, CPC is a CDFI focused on affordable housing and community revitalization CPC and subsidiaries provide a full suite of construction lending, permanent lending, and equity investing products 	<ul style="list-style-type: none"> Conducts significant financing for <i>unsubsidized</i> affordable housing at scale (like CIC in Chicago)
Home Funders Program	MA	Collaboration of 5-9 family foundations	PRIs and Grants	<ul style="list-style-type: none"> Collaborative formed in '03 to address affordable housing crisis for low-income families Founding members pooled \$16M in PRIs and grants; grew to over \$21M Long-term (5-20 year) loans made to affordable housing projects through two housing finance intermediaries: Community Economic Development Assistance Corporation (CEDAC) and Mass Housing Partnership (MHP), at very low rates for a range of pre-development and development uses In return for below-market rates, developers commit to set aside at least 20% of project's units for extremely low-income families While these loans can support health and safety rehabilitation work, they usually only cover 5-10% of total project costs, which means they must be used alongside other capital sources 	<ul style="list-style-type: none"> Several private funders came together under shared concern that "without adequate housing, all other social investments are at risk" Home Funders lends to intermediaries at 1%, and they lend out at 2-3% to developers
Maryland Housing Rehabilitation Program	MD	HUD and state funds	Grant and Loan	<ul style="list-style-type: none"> Paired with HUD-funded Lead Hazard Control grant in cases where a child has an EBL and the home requires basic systems repair (roof, plumbing, etc), in addition to lead hazard control Up to 95% LTV with interest of 0-7%; up to 20 years with deferred payment for households <50% AMI For properties <4 units; administered through MD Department of Housing 	<ul style="list-style-type: none"> Higher risk tolerance in a publicly funded program targeted to smaller "mom and pop" properties with owners <80% AMI



X HOUSING: ADDITIONAL CASE STUDIES (3/5)

Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Childhood Lead Paint Hazard Data Sharing	Chicago, IL	Robert Wood Johnson Foundation's Data Across Sectors for Health (DASH)	Grant	<ul style="list-style-type: none"> • CDPH and the University of Chicago's Center for Data Science and Public Policy created a predictive model that helps identify young children at risk of being lead poisoned in homes with lead paint • The model provides an opportunity to prevent lead paint exposure through proactive home lead inspections and blood testing at an earlier age • The predictive model combines data from multiple sectors including public health, census, buildings and the county assessor's office to create real-time interfaces that identify where at-risk children live • CDPH housing inspectors will be alerted to inspect the homes of at-risk children for lead paint hazards either through an app or by physicians at community health centers through electronic health records (EHR) 	<ul style="list-style-type: none"> • Real-time interfaces expedite data sharing • The code is being made publicly available so the model can be vetted, reproduced, and replicated by others
Find it, Fix it, Fund it		Kresge	Grant	<ul style="list-style-type: none"> • Launched by NCHH and National Safe Healthy Housing Coalition • Came out of Flint crisis, where advocates believed there was a unique window of opportunity to focus on a broader national campaign to get localities / states to find new sources of funding • 150 members • Drafted over 50 recommendations for Congress 	<ul style="list-style-type: none"> • Unique coalition of a significant number of organizations signed on to commit to addressing lead poisoning nationwide



X HOUSING: ADDITIONAL CASE STUDIES (4/5)

Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Target Area Home Improvement Program	Milwaukee-Racine-Waukesha	Local bank unsecured loans matched by HUD-funded City Grants (50%)	Grants	<ul style="list-style-type: none"> In Milwaukee, low interest bank loans used to match lead abatement grants (TCF Bank makes unsecured loans for up to \$5,000 for up to 60 months to city buildings in Milwaukee, matching grants given to lead abatement recipients in low-income neighborhoods; grant funding from HUD) For owner occupied or duplex dwellings 	<ul style="list-style-type: none"> Low-interest bank loans match grants Program initially motivated by CRA credits in low-income area Abatement work was in the \$5k-6k range Only 10-20 loans made so far (low uptake) – the City has been denied additional funding for the past two years
Pooled bank funds for lead abatement contractors	Chicago	HUD	Grants, NMTC	<ul style="list-style-type: none"> City of Chicago loaned \$3M in HUD grant money to Delta Redevelopment Institute for remediation of lead hazards in occupied multi-family housing Delta used NMTC allocation to raise a matching amount from 5 banks The public-private funds were then loaned to a lead abatement service contractor to finance window replacement and lead remediation work in affordable apartment buildings (4+ units) Contractor responsible for repaying private funds, but used incentive of 50% forgiveness and a smaller pool of weatherization grants in marketing the financing program to landlords 	<ul style="list-style-type: none"> Free weatherization work was included, funded through Dept of Environment Once private portion of loan repaid after 7 years, the remaining 50% is forgiven (via Delta's city grant funds) 400+ units completed, at a cost of \$6,250 per unit (~\$2.5M) The program took longer than expected to set up (18mos to complete the units financed with grant and loan funds, whereas only 2 months to complete grant-funded units)



X HOUSING: ADDITIONAL CASE STUDIES (5/5)

Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Lead Elimination Program	Omaha, NE	Omaha Healthy Kids Alliance / Bank	Low-interest bank loans to qualified homeowners	<ul style="list-style-type: none"> First National Bank has agreed to participate in a lead elimination program sponsored by the Omaha Healthy Kids Alliance Offering up to 50 low-interest loans of 4-6%, lending up to \$10K for qualified homeowners that will use lead abatement approved contractors 	<ul style="list-style-type: none"> Direct bank participation
Coalition to End Childhood Lead Poisoning in Baltimore (now GHHL)	Baltimore, MD	Annie E. Casey	Lead hazard evaluation/abatement/remediation	<ul style="list-style-type: none"> Coalition was able to leverage Casey's support as match funding to attract federal, state, and local grants and additional investment from other foundations 	<ul style="list-style-type: none"> Multi-stakeholder funding approach
Lead Hazard Control in Mahoning County	OH	County and Bank	Loans	<ul style="list-style-type: none"> Mahoning County has a contract with First Place Bank to provide financing for lead hazard control in rental properties The bank underwrites the loan but writes off the closing costs; the County buys down 50% of the loan up to \$12.5K The borrower pays 100% of the loan amount over \$12.5K 	<ul style="list-style-type: none"> First Place Bank receives CRA credit for the closing costs that it pays
Milwaukee Brownfield Site Assessment Matching Grant Program	Milwaukee, WI	City	Grants	<ul style="list-style-type: none"> Encourages redevelopment of industrial and commercial properties in Milwaukee that may be affected by environmental concerns Assessment determines environmental concerns; grants up to \$15,000 available Reimbursement grant available upon completion of work 	<ul style="list-style-type: none"> Planned reuse or redevelopment of underutilized property will include commercial industrial use (not residential) which will create new onsite jobs NOT eligible for lead, asbestos, other hazardous materials

X PERSPECTIVE: PAY FOR SUCCESS

PFS requires the alignment of several operational and financial elements

- Evidence of a connection between an intervention and an outcome – with clear attribution and measurable impact
- Savings generated would not otherwise be used to fund the intervention – and a willingness by “payors” to commit the resources if successful

Despite active discussions around the country, there remain critical barriers for PFS in Lead...

- There are clear, attributable health and education savings from reduction in lead poisoning in children; there is also evidence of longer term savings in criminal justice and increased lifetime earnings
- However, the attributable savings are not huge and do not fully “line up” as they have in other PFS programs
 - Health care savings are relatively low and do not justify the intervention on their own, while education savings total approximately \$30K per student* vs. all-in intervention cost of \$10K per home plus up to 10% administrative expense
 - The savings accrue 5-10 years after the intervention, vs. 3-5 years for most PFS programs; payors are often challenged to commit so far ahead and tracking can be complex/costly. Longer term/less attributable savings even more challenging
 - In general education has challenging in PFS – with constant budget constraints and funding formulas that often do not allow districts to keep “savings” from reduced special ed enrollment
- Nevertheless there are examples of longer-term education PFS programs** and the new federal SIPBRA fund allows up to 10 years; will need to “wait and see” where local efforts may emerge

...and a proposal was recently rejected in Cleveland for these and other reasons

- With limited savings and local capacity, no single payor would be able and willing to “own” the project, so a coalition of funders was assembled (government, schools, hospitals, business, philanthropy)
 - None stepped up as the primary owner/“champion”
 - There were varying perspectives on the cost/benefit
 - Needed to raise new revenue, e.g., soda tax
- Given the intervention expense (targeted 10,000 homes at \$16K/home) significant concern about de-prioritizing lower-cost interventions (e.g., lead-safe instead of lead-free homes) as well as competing early childhood health needs

* Based on CDC/National Center for Environmental Health’s 2017 report “Pay For Success: A How-To Guide for Local Government Focused on Lead-Safe Homes”

** Utah High Quality Pre-School Initiative (tracks cohorts of preschoolers for 8-9 years); Chicago Child-Parent Center Initiative (tracks kindergarten through 6th grade special education, with payments made on the savings annually through 12th grade)

X ENERGY: MAJOR FINANCING PROGRAMS



There are several ways that windows and other energy efficiency improvements are funded

Program	Description
DOE-funded Weatherization* Assistance Programs (WAPs)	<ul style="list-style-type: none">• Serves ~35,000 households a year in all 50 states• States set eligibility requirements and typically prioritize low-income households• Interventions are determined by an independent energy audit, with high ROI/energy cost saving repairs typically prioritized (e.g., insulation)• Many states do not include window replacement as an eligible expense, although some (e.g., NY, IL) do technically cover exterior windows and doors if recommended<ul style="list-style-type: none">– However, strict ROI calculations may guide these recommendations and preclude window replacement in practice
HHS-funded Low-Income Home Energy Assistance Program (LIHEAP)	<ul style="list-style-type: none">• Primary focus on helping low-income families pay their energy bills, but awards are rarely enough to cover families' full costs so LIHEAP offers the option for families to use up to 15% of LIHEAP funds for weatherization improvements to achieve long-term cost savings• Window replacement is an eligible use of funds, but there is no requirement that grantees do so (and based on ROI they are more likely to choose insulation and other higher-ROI interventions)
Fannie Mae Green Financing	<ul style="list-style-type: none">• Includes Green Building Certification Pricing Break for buildings that already have select green certifications and Green Rewards for buildings that will undergo improvements within 12 months and yield energy savings of >15% or energy/water savings of >30%• Key challenge is timing, as projects find it challenging to secure certification quickly enough to align with their property acquisition financing timing

* Weatherization is a type of energy efficiency, though they are frequently used interchangeably given significant overlap, and measures of each type are often combined under single program umbrellas (e.g., Weatherization Assistance Programs); there is some energy efficiency work that falls outside of weatherization (e.g., replacing lightbulbs or refrigerators, installing solar panels)

X ENERGY: OVERVIEW (1/2)



> Energy-related programs contribute to lead remediation primarily through window replacement, which removes much of the lead hazard

- Most funding is determined based on ROI for energy savings, and lower-cost interventions such as insulation have a higher ROI
- As a result, relatively little funding from WAPs and LIHEAP are used for window replacement today – would require a new federal rule or state-level policy for a revised ROI calculation and re-prioritization of interventions

> Utility companies frequently provide funding (often partial) to low-income customers for window replacement, either on their own or in partnership with a 3rd party lender

- Funding typically structured as loans and rebates (based on number of windows or sf replaced) with some grants (e.g., San Diego Gas & Electric’s Energy Savings Assistance Program)*
- On-bill financing is also growing, in which utilities (or lending partners) provide loans to customers for home improvements that will result in energy savings, and repayment is built into customers’ energy bills
 - On-bill financing tends to have broader accessibility and lower default rates than other loans because payments are incorporated to utility bills, and programs can use bill payment history instead of credit scores for underwriting; as of 2015, there were 19 states with active on-bill financing for energy efficiency
 - Utilities will sometimes partner with 3rd party lenders to implement these programs (e.g., Craft3 as lending partner for an Oregon program that includes several utilities and the Energy Trust of Oregon)
 - As with other programs, on-bill financing for window replacement can be challenging for homeowners because the ROI is lower than other interventions; in milder climates it may be impossible to achieve “bill neutrality”

“Weatherization isn’t going to do a lot of window replacement because it’s not cost effective. Insulation is more the focus.”

– Regional nonprofit

“Weatherization folks have a strict formula for when they will replace a window...they’ll generally avoid it if they can. We spend a lot of time trying to persuade NYSERDA to be less conservative about the savings ratio.”

– Foundation

“It has been difficult for [on-bill financing] programs to fund popular enhancements such as replacement windows because of the difficulty of assuring bill neutrality or reasonable payment periods.”

– Nonprofit advocacy group

* Based on Efficient Windows Collaborative’s 2019 list of utility and state programs



X ENERGY: OVERVIEW (2/2)

- > **State and local governments, as well as nonprofit organizations, have leveraged other funding sources for energy programs that do include window replacement**
 - Illinois used a 2009 state bond issue to fund its CLEAR-Win program (lead reduction and window replacement); the second phase is funded out of the state’s general revenue
 - Chicago’s Tax Increment Financing Neighborhood Improvement Program (TIF NIP) earmarks increased revenue from property taxes (due to rising property values) above fixed baseline levels to fund grants for safety improvements
 - Some nonprofits, like Chicago-based Elevate Energy, occasionally receive funding from legal settlements (via SEPs*) but typically require owners to match the available funding
- > **Capital typically flows from funders to property owners through revolving loan funds, grants, and forgivable loans**
 - Based on identified program examples, “pure” grants (i.e., those not part of a grant/loan matching program) tend to be targeted toward single-family and small “mom and pop” property owners
 - Large property owners appear likelier to rely on loans or grant/loan matching programs (e.g., TIF NIP) or newer programs like Fannie’s Green Financing
 - Utility-based financing (e.g., on-bill financing loans, rebates) target those who responsible for paying utility bills, so primarily benefits single-family property owners or multi-unit owners who pay for utilities
- > **Other administrative barriers can complicate energy financing, including:**
 - First mortgages, and particularly Fannie/Freddie loans, will not allow additional debt to be included
 - Small loans are costly to process and service, and a hassle for borrowers, so energy financing is often included in larger rehab projects
 - Program technicalities can create barriers for low-income property owners (e.g., denial of emergency roof repair by the city due to an outstanding parking ticket)

“[In Chicago], owners shoulder 40-50% of the energy efficiency cost because utility dollars only cover so much. They finance it somehow— with CDFI partners, out of pocket, or a bill repayment program”

– Nonprofit service provider

“We are trying to use green financing, but there is a timing issue – if developers are trying to acquire a property quickly, they might not have time to get green certifications”

– Nonprofit lender

“Financing for energy programs is virtually always coupled with a larger capitalization event (e.g., upon acquisition or refinance for a bigger rehab program)”

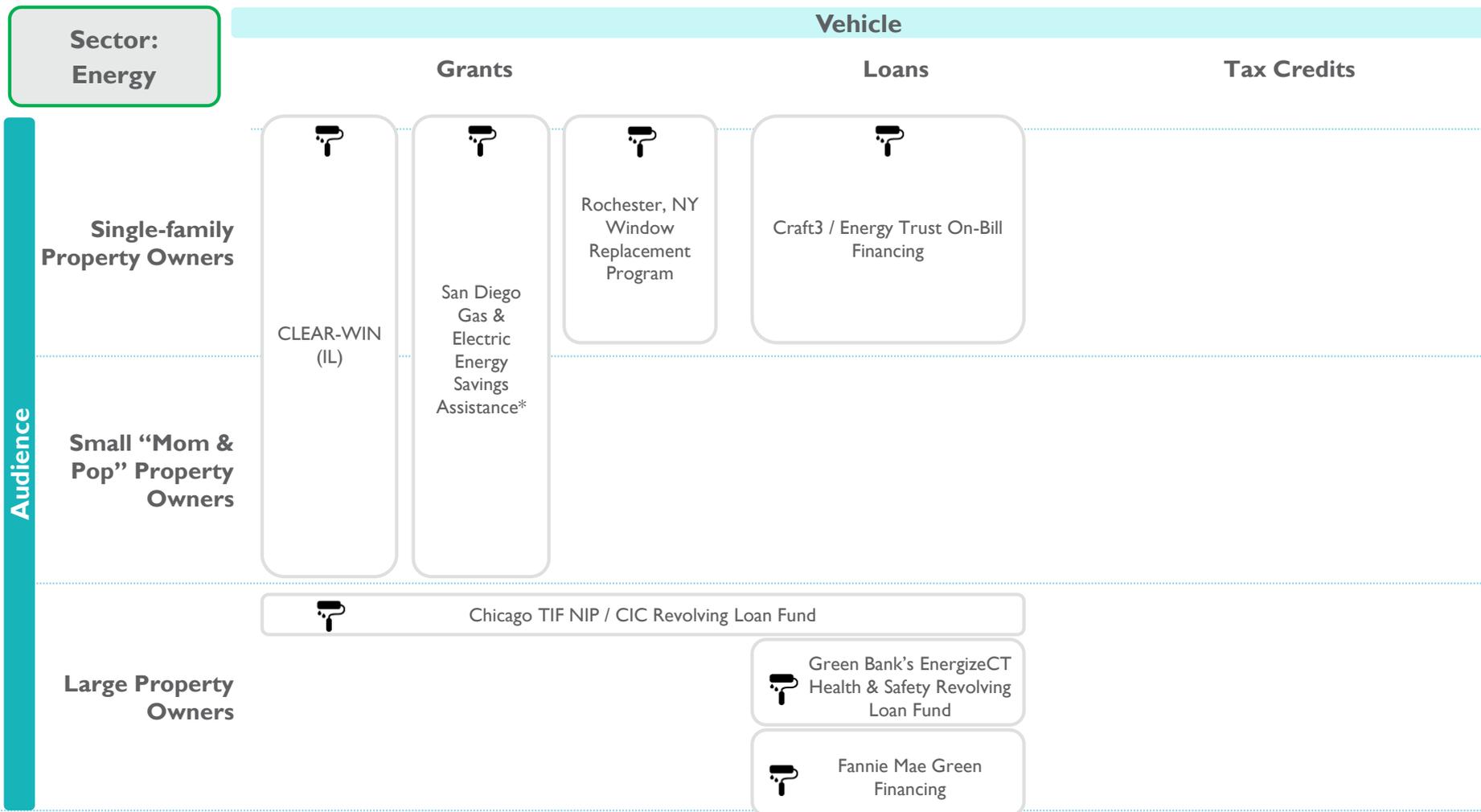
– Nonprofit lender

* SEPs defined previously as a Funding source

ENERGY: MAPPING FINANCING VEHICLES



Energy programs usually employ grants and loans, with grants targeted at single-family and small property owners more often than at large property owners





Chicago TIF NIP

Target Audience / Location	Chicago; 6+ unit buildings in designated districts
Funding Mechanism(s)	Grant & matching loan
Funding Source(s)	City tax increment financing; nonprofit mortgage financing company / financial institutions

Overview:

- > TIF NIP is a City of Chicago program administered through the Community Investment Corporation (CIC) – a nonprofit mortgage finance company
- > The city provides grants to multifamily building owners to cover 50% of exterior or life / safety improvements (up to \$5K/unit or \$100K/building), including window replacement; program primarily targets owners who have acquired vacant buildings to rehabilitate
- > Owners must match grant 1:1 and may do so through CIC’s revolving loan fund, which is capitalized by CIC’s network of ~43 financial institutions
- > The city funds its grants through tax increment financing – a mechanism by which the city fixes a particular level of property taxes in designated districts that go to the city and commits any additional taxes above that base (e.g., from increased property values over time) to initiatives that support economic/community development
- > TIF NIP has been especially valuable in communities that struggle with the “appraisal gap” because the grant funding brings the loan-to-value on CIC’s funds into a manageable range
- > The main challenges have included inconsistent funding from the city (i.e., some years with no grant funding) and limited numbers of eligible properties within TIF districts

Key Takeaways

Tax increment financing is one way for cities to earmark funds for programs relevant to lead Grants – even if partial – can be critical for overcoming the appraisal gap in weaker housing markets

Cook County Energy Savers Program

Target Audience / Location	Cook & Lake Counties, IL; 5+ unit affordable housing
Funding Mechanism(s)	Second mortgage
Funding Source(s)	City grants, PRIs from foundations

Overview:

- > The Cook County Energy Savers Program is part of the county’s Preservation Compact strategy for preserving rental housing, including affordable housing
- > CIC administers the program, using grant funding from the county as loss-reserves to attract PRIs from foundations like the MacArthur Foundation
 - Originally, CIC was going to pass through grants directly to customers, but using grants to attract PRIs instead allows CIC to stretch the funding
- > Through the program, CIC offers low-cost, short-term second mortgages that can fund energy efficiency improvements, including window replacement
 - Terms are 50% of the prime rate over 7 to 10 years, though staff indicate that payback time is often 3 to 5 years
- > The program has been quite successful and recently transitioned from its 10-year pilot phase to being integrated into CIC’s ongoing multifamily lending pool
- > However, demand for the program is vulnerable to shifts in energy costs – particularly the cost of natural gas
- > Adding non-energy-related lead remediation work into this financing could be challenging because property owners typically have limited budgets and ability to service debt not covered through immediate energy cost savings

Key Takeaways

Using grant money as loan loss reserves to attract PRIs, rather than providing it directly to customers, can enable funding to stretch further with greater impact

X ENERGY: ADDITIONAL CASE STUDIES (1/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Comprehensive Lead Reduction and Windows Replacement Program Act (CLEAR-Win)	Chicago, IL	State	Grants and loans	<ul style="list-style-type: none"> Passed in 2007, funded through 2009 state bond issue; first iteration/pilot ran from 2010-2014; now on second iteration and funded through state general revenue (\$15M/yr) Prevention-focused program that aims to replace windows in 1- to 6-unit, owner-occupied, low-income properties Provides grants in Peoria, Englewood, and West Englewood communities Administered through nonprofit, Elevate Energy From 2010-2014, installed 8,000 new windows in 466 units Elevate looking into how to leverage the \$15M into \$50M annually for 10 years 	<ul style="list-style-type: none"> Uses windows manufactured and assembled in IL and trains local individuals to do the work
Connecticut Green Bank's EnergizeCT Health & Safety Revolving Loan Fund	CT	State	Loans	<ul style="list-style-type: none"> Funded by CT Dept. of Energy & Environmental Protection & administered through CT Green Bank Revolving loan fund targeted toward low-income owners of 5+ unit properties Funds health and safety issues related to/necessary for energy-efficiency upgrades, including lead paint 2.99% for up to 20 years 	<ul style="list-style-type: none"> Specifically focused on health and safety improvements that are necessary complements to successful energy-efficiency upgrades

X ENERGY: ADDITIONAL CASE STUDIES (2/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Rochester Lead Hazard Program	Rochester, NY	Federal and City	Deferred loans	<ul style="list-style-type: none"> Via the HUD Lead Hazard Control Program, the City of Rochester provides 5-year deferred loans to landlords and owner-occupants (1-4 units); this includes, but is not exclusively for, window replacements 	<ul style="list-style-type: none"> Managed by Pathstone, a local community development nonprofit
San Diego Gas & Electric's Energy Savings Assistance Program	San Diego, CA	Utility	Grants	<ul style="list-style-type: none"> Utility provides grants to low-income customers to be used for new windows 	<ul style="list-style-type: none"> Utility company energy-efficiency grant that includes window replacement
Craft3 Oregon On-Bill Financing	Oregon	CDFI, partnered with utilities	On-bill Financing (Loans)	<ul style="list-style-type: none"> Craft3 (CDFI), partnered with Energy Trust of Oregon, provides loans up to \$5K for window replacement to customers of select utilities Loan payments are integrated into customer's monthly utility bills 5.99% APR; loan term up to 5 or 10 years, depending on loan amount 25% of loans can be for non-energy related "critical repairs" such as roof, plumbing; could potentially be expanded to include lead abatement 	<ul style="list-style-type: none"> CDFI providing financing for energy efficiency / weatherization upgrades, including window replacement; windows typically "lower on the list" for homeowners given lower ROI

X ENERGY: ADDITIONAL CASE STUDIES (3/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
CDC Long Island Weatherization Program	Long Island, NY	U.S. DOE and DHHS	Weatherization Assistance Program	<ul style="list-style-type: none"> • Free program provided to low-income Long Islanders, especially the elderly and disabled • Energy audit conducted by a building analyst to determine the most cost-effective means of reducing energy consumption • Funded by the U.S. Department of Energy and the U.S. Department of Health and Human Services and administered through the New York State Division of Housing and Community Renewal Energy Services Bureau • CDCLI has managed the program for the State of New York since the late 1980's, currently serving over 600 households on an annual basis in Nassau and Suffolk Counties 	<ul style="list-style-type: none"> • Costs fully covered for weatherization – including replacing windows when necessary – for low-income households (e.g., <\$37K annual income for household of two)



X WATER: OVERVIEW (1/3)

- > **Though lead in paint is the primary hazard for young children, lead in water (via LSLs) is still a major hazard, affecting up to 20M+ people nationally**
 - Primary responsibility for ensuring safe drinking water is shared by EPA and the states
 - EPA’s Lead and Copper Rule (LCR) requires that water utilities conduct tap sampling for lead and copper; this is currently under revision to improve public health protections
- > **Full lead service line replacement is the only way to reduce the threat of lead poisoning – partial LSL replacement does not meaningfully address the hazard**
 - Filters can be used to create lead-safe water, but require regular replacement
 - Orthophosphate can be added as corrosion inhibitor to prevent the leaching of lead and copper from pipes that goes into the water supply, but it is generally accepted that full LSL replacement is the only complete solution
- > **There are significant challenges and barriers to full LSL replacement:**
 - *Identifying location of LSLs:* Cities often lack detailed records of the location and composition of old lines; EDF scored nearly half of all states as having poor disclosure policies
 - *Accessing private property:* Without specific ordinances, municipalities and/or utilities may not have access to the private side of the LSL; even when funding for the private side of the lines is covered, property owners may not be willing to participate in a disruptive project
 - *Funding the private portion of LSLs:* LSL replacement often necessitates coordination between a private plumbing company and a utility as mixed ownership of the service line is most common; some state laws are ambiguous as to whether municipalities can use public funds to replace private LSLs, and others do not allow use of ratepayer funds
 - *Consistently testing and identifying lead in water:* Water testing is inconsistent, with differing readings in the same location, and reliance on correct administration of tests by owners
 - *Prioritization of LSLs:* Within state programs, there is limited funding for water projects, and LSLs are not always prioritized within administrative codes; authorities are already pressed to keep water rates low and adhere to affordability standards

“We used to only fund the public side [of LSL], but now we know it is a huge health risk [if we don’t address the private side]” – State SDWLP

“There are a lot of legal barriers, particularly on the municipality side, to accessing private property, so financing and getting to the home are the big hurdles”
- Expert consultant

X WATER: OVERVIEW (2/3)



> Financing for LSL replacement varies, though states most commonly tap into federal funding sources, including flexible funds for SRFs

- Key federal funders include EPA and USDA; the primary federal funding streams include the Drinking Water State Revolving Fund (DWSRF) and, to a lesser extent, the Clean Water SRF
 - Some have creatively used DWSRF, including Wisconsin’s use of principal loan forgiveness to access private property and the Linked deposit loan program in Iowa and Ohio
 - SRF’s are the cheapest capital available; they are cumbersome to set up administratively, but foundation grants can help municipalities with seed funding to establish a sustaining SRF
- Additionally, the Water Infrastructure Finance and Innovation Act (WIFIA) provides long-term, low-cost supplemental loans for water and wastewater infrastructure projects (borrowers include gov’t entities, partnerships / JVs, corporations and trusts, CW and DWSRF programs)
- However, replacement of pipes / plumbing is not an eligible expense under HUD’s lead-based paint hazard and lead hazard reduction demonstration funding

> There other emerging funding strategies that could support LSL replacement

- Michigan is using CHIP for service line and fixture replacements
- The CDFI Craft3 finances a clean water loan program to replace failing septic systems; includes flexible capital (up to 120% LTV) with deferred payments
- In Illinois, utilities may charge to recover annually any reasonable costs incurred to comply with lead hazard laws; in Wisconsin, the passage of Act 137 allowed utilities permission to access ratepayer funds to complete work on private property; however, LSL replacement can be particularly challenging in low-income communities where ratepayer increases are unrealistic

“The size of the LSL pipe isn’t the biggest factor; so in some ways, it’s better to go after the bigger apartments with low-income residents, because it’s a bigger bang for your buck!”
– Nonprofit advocacy group

“It’s not [always] about whether there is enough money, it’s about whether it’s repaid [when utility rates are raised]; the communities who need it most are the ones where you simply can’t increase their rates any more to pay those SRF and WIFIA funds – the neediest can’t do it.”
- Nonprofit advocacy group



- > **Like lead paint, regulatory policies differ by location and can trigger action where implemented**
 - Landlords are required to disclose if their properties have LSLs in Cincinnati, Philadelphia, and soon in Washington, DC; cities also offering reduced rates for expedient LSL replacement, and landlords are taking them up on this opportunity (suggesting that the combination of required disclosure and grants is working)
 - In Indiana, the investor-owned utilities American Water will move to replace customer-owned LSLs in the next 10-20 years; using a single contractor, fully replacing the line will cost \$3,500, (saving 20-30% of the cost vs. homeowners replacing on their own)
 - Prioritizing where to address LSLs first is still up for debate at the local level; one municipality in WI set up a scoring system that gives priority to lower-income households and those with young children

- > **There is momentum behind advocacy and educational efforts to promote the replacement of LSLs:**
 - The **Lead Service Line Replacement Collaborative** is a group of nonprofits, funders, utilities, and associations across multiple sectors (public health, housing, environment, water) that all support accelerating the replacement of LSLs, and are at the table to figure it out
 - The **EPA Water Clearinghouse** allows any organization with funding to contribute to the site, pointing homeowners, property owners, municipalities, and utilities to resources and funding sources in their locations

X WATER: MAPPING FINANCING VEHICLES



In general, water financing does not appear to be as explicitly targeted at particular audiences as financing in other sectors (e.g., housing)

Sector: Water		Vehicle					
		Grants		Loans		Tax Credits	
Audience	Single-family Property Owners						
	Small "Mom & Pop" Property Owners	State of NY Lead Service Line Replacement	Home Lead Hazard Reduction Program	Great Cincinnati Water Works LSL Replacement Program	New Jersey LSL Assessments & Bonds	Craft3 Septic Financing	Iowa Linked Deposit Program
	Large Property Owners						



Wisconsin Safe Drinking Water Loan Program (SDWLP)

Target Audience / Location	Funding recipient: Publicly or privately owned water systems, and nonprofit water systems Audience: Any residential property owner
Funding Mechanism(s)	Subsidized loans
Funding Source(s)	Drinking Water State Revolving Fund (DWSRF), with flexible terms

Overview:

- > EPA funds DWSRFs across the country; states provide a 20% match (loan terms up to 30 years for a range of projects, including DW treatment, pipe installation / replacement, and source water protection)
- > Wisconsin has **leveraged DWSRF funding to fund the SDWLP**, jointly administered through Dept of Natural Resources and Dept of Administration
- > Loans are offered at **subsidized rate** (55% of state's market rate) to disadvantaged communities
- > Within the SDWLP, the state **established a 2-year program** (2017-18) to replace Lead Service Lines on private property **using principal forgiveness (PF)** program (allowed them to get around a rule that municipalities could not secure rate payer money to do work on private property, and therefore PF **allowed for no additional debt incurred** on the property)
- > PF is an **additional subsidy** used to reduce the size of a loan; clean water loans are written for the full amount, but the PF portion is forgiven at the time of disbursement, and the municipal bond pledged as security for the loan only needs to cover the amount of the principal that will actually be repaid
- > As the first state to regulate utilities, WI also has a Public Service Commission that oversees and ensures affordability and quality of services provided, and works closely with the relevant state entities
- > Home/property owners had the **choice** to participate in a **large municipal contract** to cover replacements, or to select pre-qualified plumbers themselves and seek reimbursement

Key Takeaways

Though there are many competing priorities, states have the ability to creatively use (or create) funding streams for LSL replacement; these will require some recapitalization to allow for flexibility for the highest need communities

X WATER: ADDITIONAL CASE STUDIES (1/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
American Water LSL replacement	IN	Ratepayer	Private	<ul style="list-style-type: none"> IN allows companies to incorporate the cost of LSL replacement into the water rates paid by customers The investor-owned utilities American Water will move to replace customer-owned LSLs in the next 10-20 years; using one contractor, fully replacing the line will cost \$3,500, saving 20-30% of the cost (if the homeowner were to manage the private side) 	<ul style="list-style-type: none"> Accesses ratepayer funds as separate stream Savings realized by using one contractor for both public and private side of the lines All customers pay the same rate across 27 communities Leveraging both SRF and WIFIA
State of NY Lead Service Line Replacement	NY	State	Grants	<ul style="list-style-type: none"> LSLRP funds will be used to replace the entire length of residential lead service lines, from the municipal water main to the residence Funded by a \$20M allocation in the NY 2018 budget Funds are awarded to municipalities 	<ul style="list-style-type: none"> Significant state involvement and commitment to LSL replacement
New Jersey LSL Assessments & Bonds	NJ	State	Loans	<ul style="list-style-type: none"> NJ allowed Newark and other municipalities to levy special assessments and issue 30-yr bonds to replace LSLs Funded through loans from NJ Infrastructure Bank or Dept of Environmental Protection 	<ul style="list-style-type: none"> Categorizes LSL replacement as a “local improvement, which allows the municipality to assess the cost of the project on local property owners in the vicinity who benefit from the project”

X WATER: ADDITIONAL CASE STUDIES (2/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
Home Lead Hazard Reduction Program	Portland, OR	Portland Water Bureau	Grants	<ul style="list-style-type: none"> Jointly developed in 1997 among Portland Water Division Bureau, Multnomah County Health Department, and OR Health Division Annual funding for the program through ~\$500K from Portland Water Bureau and additional \$100K from the Corporation for National Service's Funding for CLEAR Corps Services provided by LHRP include outreach, education, and water testing, and are free to all customers of PWB and local water providers who receive water from Portland 	<ul style="list-style-type: none"> Water Bureau partners with community organizations Free lead in soils test is also offered to households with income of < \$33K for family of four
Great Cincinnati Water Works LSL Replacement Program	Cincinnati, OH	Utility	Grants / subsidy	<ul style="list-style-type: none"> GCWW committed to replace all public LSLs in the next 15 years Property owners required to replace the private side whenever a LSL will be disturbed GCWW created a cost-sharing program for customers if owners elect for GCWW contractors to perform the LSL replacement (GCWW pays maximum \$1,500 for each property) 	<ul style="list-style-type: none"> Any unpaid balance on the property owner side will be assessed semi-annually on their property tax bill over 5-10 years Low-income assistance available (privately donated funds)
Iowa Linked Deposit Program	Iowa	State	Loans	<ul style="list-style-type: none"> Iowa offers low-interest loans through participating lenders to homeowners for the replacement of inadequate or failing septic systems Linked deposit is managed through the SRF program by the Iowa Finance Authority Loan amounts start at \$2,000 with terms up to 10 years and a 3% interest rate, and can fund 100% of actual costs The deposit does not guarantee the loan nor is it collateral for the loan; it is only to reduce the interest rate charged to the borrower 	<ul style="list-style-type: none"> Financial arrangement where a municipal entity deposits funds with participating financial institutions with a below-market rate; the principal amount of the investment is then loaned to qualified individuals at a below-market rate (serviced by the financial institution) The borrower can use his/her own lender

X WATER: ADDITIONAL CASE STUDIES (3/3)



Initiative / Program	Location	Funder	Funding Type	Description	Unique Characteristics
City of Kenosha	Wisconsin	State		<ul style="list-style-type: none"> Kenosha is the first city in WI to utilize available funding for LSL replacement projects (enabled by passage of WI's "Leading-on-Lead Act") Kenosha hired 120WaterAudit (in IN), a company created because of the demand for clean, lead-free water 120WaterAudit's cloud-based software technology platform helps manage full cycle of LSL replacement, from identifying/prioritizing homes to water-testing services 	<ul style="list-style-type: none"> The combination of the state legislation that opened up funding for LSL replacement, and the creation of a new company who licenses its SaaS program specifically to test water for lead, allows for this unique combination
Craft3 Septic Financing	Oregon	CDFI	Loan	<ul style="list-style-type: none"> Loan financing for septic systems 25 years or older Started with grant capital for Revolving Loan Fund Dept of Ecology manages the CWSRF, and Craft3 is lender partner (Craft3 takes on risk of individual loans, and pays Ecology back full SRF amount) Underwriting on a loan-specific basis Deferred payment options for low-income households Can go up to 120% LTV, and debt-to-income up to 55%, depending on borrower's credit 	<ul style="list-style-type: none"> Deferred payments for low-income homeowners; payable upon sale Example of specialized sector loan (not a "blanket home equity loan") Similar repayment rates on deferred and non-deferred; maintain loan-loss reserve to cover losses



X HEALTH: OVERVIEW

- > Over the last decade there has been an acceleration in the focus on and funding for social determinants of health as part of Medicaid and related programs; this has been driven by a series of shifts in Medicaid payments themselves along with increased flexibility through special waivers and funding plans such as DSRIP and HSI
- > As a result experimentation and innovation has taken place at the state level, with a range of strategies and directions:
 - New provider structures in some regions, such as Coordinated Care Organizations (CCOs) in Oregon and Regional Care Collaborative Organizations (RCCOs) in Colorado, focus on the integration of physical, behavioral, and social services as well as community engagement and collaboration. In addition they have been able to leverage community benefit dollars for housing and other community development needs
 - CMS has been advocating the use of customized State Plan Agreement under Medicaid’s Health Services Initiative that does not require waiver and allows states to invest in a wide-ranging set of interventions for low-income children’s health (see next slide), including lead-related work; however while many states have pursued an SPA only several have focused on lead due to competing priorities
 - DSRIP initiatives are waivers that give states additional flexibility for designing their Medicaid or Child Health Insurance Plan efforts. Implemented in eight states, a majority of these funds are being used to expand Medicaid eligibility and clinical services for low-income residents. These efforts are focused on value-based service delivery and are largely focused on coordinated care delivery and quality improvement, population health, and HIS infrastructure; DSRIP has not yet been used for housing, though there has been a lead-related DSRIP proposal in New York that was not implemented due to lack of health care return
- > Nearly all of the health-funded lead remediation today is triggered by an elevated BLL
 - Some states have been willing to prioritize lead remediation as a use of limited HSI funding; key challenges have included a shortage of certified contractors and a lag in the flow of federal funding after the investment needs to be made
 - States have prioritized these funds for homes identified by the DOH based on reported BLL cases, similar to the use of traditional Medicaid reimbursement and 1115 funds

“A lot of these (health) challenges are geographically focused and specific, and community-engagement oriented”
- CDFI

“We have unlocked our ability to use CHIP, but we still need to get to every state - \$960M unused dollars every year!”
- Nonprofit service provider

“There are a lot of competing priorities for the available flexible money. Lead is important but in many places may not be top of the list.”
- Nonprofit advocacy group

X HEALTH: STATE USE OF MEDICAID FOR NON-MEDICAL LEAD SERVICES



State	Funding Source	Description
GA and TX	Medicaid reimbursement	<ul style="list-style-type: none"> Environmental inspectors from local health departments receive Medicaid reimbursement for lead inspections.
RI	Section 1115 Medicaid Waiver	<ul style="list-style-type: none"> In addition to funding comprehensive home hazard inspections, Medicaid will cover cost of replacing windows in homes with a child BLL >10, though this has been rare due to low reimbursement and high complexity of the program
IN	CHIP HSI SPA	<ul style="list-style-type: none"> Recently received federal authority to use \$15 million in CHIP HSI funding over the next five years to specifically focus on abatement and removal of lead hazards in homes and in soil
MI	CHIP HSI SPA	<ul style="list-style-type: none"> Spending \$24M/year for 5 years to remove/encapsulate home lead hazards, replace LSLs and fixtures, remove/cover soil hazards, along with testing and training
MD	CHIP HSI SPA	<ul style="list-style-type: none"> Healthy Homes for Healthy Kids – lead identification and abatement programs for low-income children through DHCD; includes home and soil Childhood Lead Poisoning Prevention & Environmental Case Management – environmental assessment and in-home education programs in high-need counties
OH	CHIP HSI SPA	<ul style="list-style-type: none"> Abate paint, dust and soil; priority for homes under orders of DOH or local board of health Integrating lead-safe housing into existing rental registry

CMS GUIDANCE ON HEALTH SERVICES INITIATIVE

“An HSI must directly improve the health of low-income children less than 19 years of age who are eligible for CHIP- and/or Medicaid, but may serve children regardless of income.

As of November 2016, we have approved 26 HSI state plan amendments (comprised of 49 programs/projects) in 19 states. All HSIs focus on improving the health of low-income children, and typically involve provision of preventive services and interventions. Some examples include Massachusetts’s initiative to prevent youth violence through after school programs aimed at mitigating the consequences of trauma and promoting healthy development, Missouri’s initiative to promote immunizations among low income families that are less likely to receive the recommended immunizations, and Missouri’s initiative to increase awareness of the risks from exposure to lead and importance of blood lead screening. In addition, several states have implemented healthy families’ initiatives, which include home visits to teen parents in which staff support positive parent-child interactions and provide crisis intervention and referral to other services, as needed.

We encourage states to consider initiatives to increase blood lead level screening for young children, which is important to identify children with elevated blood levels and refer them to needed developmental assessments and medical services, which they are entitled to receive under Medicaid or may receive through the CHIP. States can also use this an opportunity to connect these children to preventive interventions that can help identify and address sources of the lead exposure.

In addition, CMS recently approved an HSI for lead abatement activities in Michigan in response to the public health emergency of lead exposure related to the Flint water system. The HSI will provide coordinated and targeted lead abatement services for eligible homes of Medicaid and CHIP eligible children. Services funded through the HSI include the removal, enclosure, or encapsulation of lead based paint and lead dust hazards; the removal and replacement of surfaces or fixtures, which can include water service lines and other fixtures identified during an environmental investigation as lead hazards; the removal or covering of soil lead hazards; and training to ensure there is a sufficient number of qualified workforce to complete the lead abatement activities.

Any state pursuing a lead abatement HSI would need to demonstrate the need the for the initiative and must meet the following criteria: individuals performing abatement service must be properly certified by the state; performance of the abatement must be demonstrated to be effective in removing all lead hazards; the program must be time limited; and the state must work with CMS to develop metrics to measure the effectiveness of the lead abatement activities. Any HSI focused on water-based lead abatement must demonstrate how the strategies, either alone or in combination with other resources or state and local efforts, ensure complete and not partial abatement of service lines and other related fixtures. In addition, states must assure in the CHIP State Plan that they will not supplant or match CHIP federal funds with other federal funds, nor allow other federal funds to supplant or match CHIP federal funds. States should be able to demonstrate that they have a process for coordinating work with other federal agencies and other federal funds.

In order to implement an HSI, states submit a CHIP state plan amendment to CMS that includes a detailed description of the HSI program under section 2.2 of the state plan. States are also required to submit updated budget information under section 9.10 of the state plan. Through the SPA process, states will need to demonstrate the populations served by the HSI, including the proportion of low-income children served, and how the purpose of the HSI will improve the health of children.”

Source: CMS FAQs – Jan 2017



X ANCHOR COMMUNITY BENEFITS: OVERVIEW

- > The Affordable Care Act made two updates to the community benefits requirements for nonprofit health systems, both of which provide a stronger basis for community development and healthy homes investment
 - Hospital must determine how to spend community benefits funds at least every three years through transparent decision-making actions, beginning with a Community Health Needs Assessment (CHNA)
 - Much of CHNA work to date has focused on basic health access and prevention, along with population health and social determinants, typically food, safety, jobs, and housing stability
 - Eligible community health improvement services now include “community building,” including housing, environment, and community development; hospitals will be increasingly looking to new areas of focus as uninsured rates decline
- > In addition to grants from their charitable foundations, health systems hold over \$400B in investment assets that hold significant potential for community development and health – and there are an expanding set of advocates and resources that are increasing traction for community investment by anchors
 - Networks such as the Democracy Collaborative’s *Hospitals Aligned for Healthy Communities* and *Build Healthy Places Network* are actively engaging health systems
 - Sector leaders have already launched strategies to invest in local housing development and preservation, including Johns Hopkins, University of Pennsylvania, and University of Chicago
 - However there are limited examples of direct investment in housing rehabilitation; where it exists, however, it has been skewed toward exterior improvements, which might but does not always include windows
 - Nevertheless anchors represent a promising new source of support for lead remediation in their footprints

“Our orientation is toward quality of life and pride in the neighborhoods surrounding our facilities.”
– Health system

“This is a small area of traction that is getting larger”
– Nonprofit service provider

“Even a 2% shift in health system investment portfolios to CDFIs would represent an infusion of approximately the same amount of resources that are allocated in one year by the US government for the CDFI Fund and New Market Tax Credits.”
– Democracy Collaborative’s *Hospitals Aligned for Healthy Communities*

ANCHORS: HEALTH SYSTEM INVESTMENTS IN HEALTH AND HOUSING



Health System	Location	Description
OSU Medical Center and Nationwide Children's Hospital	Columbus OH	<ul style="list-style-type: none"> In addition to a broad portfolio of community health programs. OSUMC invests in its surrounding neighborhoods by funding exterior home repairs in response to homeowner priorities; may include roof, siding and window repair/replacement Nationwide Children's partnered with a local CDC to launch Healthy Homes nonprofit developer with a goal of revitalizing a 52-block neighborhood on Columbus's South Side; in addition to the hospital, funding has been drawn from the United Way, JPMC, and the city. Programs include: <ul style="list-style-type: none"> Housing rehabilitation and home repair, providing project and construction management support Tiered grants to homeowners < 80% AMI for exterior work including doors, windows, roof and other needs performed by Habitat for Humanity
University Hospitals	Cleveland OH	<ul style="list-style-type: none"> In 2014-17, Greater University Circle Community Health Initiative (GUCCHI) formed the Cleveland Foundation and several health systems along with community partners, identified critical health needs in the surrounding neighborhoods including child lead poisoning and infant mortality; also driven by 2015 newspaper series on high lead poisoning rates <ul style="list-style-type: none"> Conducted a door-knocking campaign to build awareness, touching ~3,500 residents and referring 100+ homes for lead abatement; some frustration with limited action However, next steps on hold as a "more complex and expensive public health problem"
Cooper Foundation	Camden NJ	<ul style="list-style-type: none"> Independent nonprofit affiliated with Cooper University Health Care; raises funds from corporate donors paired with tax credits to invest in community development projects Has included acquiring and renovating vacant properties in the neighborhood for affordable housing
Stamford Hospital	Stamford CT	<ul style="list-style-type: none"> Stamford's 2012 CHNA identified the two unhealthiest neighborhoods as adjacent to the hospital, which led to a partnership with Charter Oak Communities to develop the Vita Health and Wellness District; district includes mixed income housing, health care services, parks, wellness programs, and community engagement
Bon Secours Hospital System	Marriottsville MD	<ul style="list-style-type: none"> Bon Secours invests up to 5% of its Long-Term Reserve Fund through local financial intermediaries for housing, food and health access, small business development, and has established a Green Revolving Loan Fund for energy efficiency investments



X ANCHORS: NETWORKS OF HEALTH ANCHORS

Over the last ten years several major networks have launched with a goal of creating tools and establishing communities of practice for health anchors to invest in their communities

Network	Membership	Purpose	Relevant Activities
Hospitals Aligned for Healthy Communities (Democracy Collaborative)	Over 100 hospitals and health systems	<ul style="list-style-type: none"> • Develop a community of practice for health systems to invest in their communities • Create a robust toolkit for community development strategies including workforce, purchasing and investment 	<ul style="list-style-type: none"> • Investment toolkit provides guidance for collaborating with CDFIs, CDCs and other community partners • Regular convening offers platform for dialogue and information-sharing with large number of leading health systems nationally
Build Healthy Places Network (funded by RWJF and others)	Health systems, philanthropy, nonprofit advocates and community organizations, CDFIs, government agencies, and others	<ul style="list-style-type: none"> • Coordination of the community development and health sectors, which have been historically siloed • Facilitate research, convening, case studies, and training 	<ul style="list-style-type: none"> • Creation of cross-sector “Community Indicators” to track community health • Case studies highlighting local efforts to improve housing quality and inclusion of SDOH in projects • News items on environmental hazards in housing

X AGENDA

Project Overview

National Context

Landscape Research

Solutions for Philanthropy

Scale & Geography

X SOLUTIONS: STRATEGIES FOR DEPLOYING FINANCING

Strategy	Financing Mechanism
<p>1 Work through lenders and agencies already financing small, unsubsidized properties</p>	<ul style="list-style-type: none"> • Provide flexible loan capital and supporting grants to CDFIs, for- and nonprofit lenders, and others that can “piggyback” on larger loans to acquire and/or renovate single family or small multifamily properties in LMI neighborhoods • Provide flexible loan capital and supporting grants to CDFIs, agencies, and others that can “piggyback” on programs to preserve affordable housing
<p>2 Replicate and capitalize stand-alone lead programs</p>	<ul style="list-style-type: none"> • Replicate and capitalize direct lead financing programs, e.g., Massachusetts/“Get the Lead Out” • Provide flexible loan capital and supporting grants for lead financing that can be braided and packaged with other home improvement and energy programs
<p>3 Provide grants and bridge capital that leverage public funding</p>	<ul style="list-style-type: none"> • Stretch public funding by providing matching grants and forgivable loans • Use grants to subsidize energy-efficiency programs to include windows • Pilot a state-level water revolving loan fund by replicating the federal DWSRF using state and private capital • Provide bridge funding to “float” the use of federal Administrative funds, e.g., Medicaid/CHIP, water*

* Need to validate regulatory flexibility



“PIGGYBACK” FINANCING: DESCRIPTION

<i>Financing Mechanism</i>	<i>Description</i>	<i>Channels and Partners (examples)</i>
Provide flexible loan capital and supporting grants to “piggyback” on larger loans for acquisition/renovation	<ul style="list-style-type: none">• Provide capital and credit enhancement to incorporate lead remediation into larger renovation projects; target lending for “naturally occurring” affordable housing and programs to increase mortgage affordability in properties <6 units, as well as in unsubsidized larger projects• Capital structure should encourage uptake while managing payback risk; design includes low/no interest, higher LTV, and/or deferred payment• Mechanisms could include:<ul style="list-style-type: none">– Deployable loan capital– Credit enhancement	<ul style="list-style-type: none">• CDFIs who lend to smaller properties: CIC/Chicago, CPC/NY, Self-Help/NC• Non-CDFI lenders with relevant programs, e.g., Neighborhood Housing Services/Chicago• Banks originating and financing subsidized mortgage products, e.g., Detroit Home Mortgage• State Housing Finance Agencies’ subsidized loan programs, e.g., Massachusetts/Perm Plus• Other partnerships, e.g., Detroit’s Rehabbed & Ready (partners include Detroit Land Bank, Home Depot, and Quicken Loans)• Nonprofit service providers who advise home/property owners: Elevate Energy/Chicago, Community Housing Solutions/NC
Provide flexible loan capital and supporting grants to CDFIs, agencies, and others that can “piggyback” on programs to preserve affordable housing	<ul style="list-style-type: none">• Similar to above, but work through agencies and programs focused on preserving affordable housing by offering subsidized financing in return for affordability commitment	<ul style="list-style-type: none">• CDFIs/nonprofit lenders with Capital Magnet Fund and similar programs• Other lenders/agencies with relevant programs, e.g., Bay Area Preservation Pilot (BAPP)

X 2 STAND-ALONE LEAD PROGRAMS: DESCRIPTION

Financing Mechanism	Description	Channels and Partners (examples)
<p>Replicate and capitalize direct lead financing programs</p>	<ul style="list-style-type: none"> • In geographies with regulatory requirements/other incentives for property owners, identify deployment partners to design, capitalize, and market no interest, deferred payment loans for lead remediation 	<ul style="list-style-type: none"> • State HFAs and others offering specialized home repair financing products, e.g., Massachusetts/“Get the Lead Out”
<p>Provide flexible loan capital and supporting grants for stand-alone loans for lead remediation</p>	<ul style="list-style-type: none"> • Directly finance lead remediation by capitalizing lenders to small/unsubsidized properties to provide loans with low/no interest, high LTV, and/or deferred payment; mechanisms could include: <ul style="list-style-type: none"> – Deployable loan capital – Credit enhancement • Work closely with local partners to source and advise borrowers on braiding a range of home improvement and energy programs • Provide targeted operating and TA grants to lenders and partners 	<ul style="list-style-type: none"> • Same as above • Large-scale land trusts/banks, e.g., Elevation Community Land Trust/CO • Nonprofit service providers who advise home/property owners: Elevate Energy/Chicago, Community Housing Solutions/NC

X 1 2 INTEGRATED AND STAND-ALONE LENDING: WORKPLAN FOR ACTION

Research: *Analyze local market*

- > Identify and segment high-risk properties
- > Map landscape of local lenders, intermediaries; understand existing lending and affordable housing preservation programs
- > Identify and map nonprofits that work with home/property owners on affordability, preservation, energy efficiency
- > Scan other potential funders/partners (e.g., CDCs/nonprofit developers, municipal/state programs, regional/national philanthropy)
- > Conduct initial conversations with key players to assess appetite and capacity

Design: *Adapt strategy*

- > Work with partners to tailor new capital structure and terms, define outreach and deployment channels
 - Type of capital that will “work” for property owners and with existing programs/activities
 - How borrower pipeline can be developed and new funding integrated
- > Define potential operational model, including flow of funds, underwriting, servicing

Pilot

- > If appropriate, design pilot to test demand and operational feasibility
- > Track key metrics, including total loan/unit volume, uptake rate, repayment, pace of deployment
- > Evaluate and plan to expand

X 3 LEVERAGE PUBLIC FUNDING WITH GRANTS & BRIDGE CAPITAL: DESCRIPTION

<i>Financing Mechanism</i>	<i>Description</i>	<i>Channels and Partners (examples)</i>
Stretch public funding through matching grants and forgivable loans, or leverage to attract additional funding	<ul style="list-style-type: none"> • Provide matching grant capital to public funding being used for lead remediation and/or to create hazard free housing (ie, via redevelopment), e.g., City of Milwaukee Brownfields Site Assessment Matching Grant Program • Provide matching grant capital for city- or bank-funded low-interest loans used for lead abatement (e.g., Milwaukee / Target Area Improvement Program) • Utilize grants to attract PRIs (e.g., Cook County Energy Savers) 	<ul style="list-style-type: none"> • Banks and community lenders willing to participate in matching program to maximize lead abatement dollars • Cities with a willingness to provide subsidy for brownfields
Subsidize energy-efficiency programs to include windows (with grants)	<ul style="list-style-type: none"> • Subsidize inclusion of windows in energy efficiency programs (potentially without reference to lead), including for on-bill utility financing for low-income customers • Provide matching grant capital to community organizations who support residents with energy efficiency and weatherization financing 	<ul style="list-style-type: none"> • Utilities (Craft3 / Oregon) • Nonprofit service providers (e.g., Elevate Energy / Chicago) • Cities (e.g., Rochester Windows Program)
Pilot a state-level water revolving loan fund by replicating the federal DWSRF using state and private capital	<ul style="list-style-type: none"> • Replicate and capitalize the sustaining federal DWSRF using state and private capital, avoiding the cumbersome set-up and restrictions of state programs • Provide flexible capital (e.g., to seed the initiative and recapitalize as needed) and operational / capacity grants 	<ul style="list-style-type: none"> • CDFI intermediaries • City / municipality • Local / national foundations and other private capital
Provide bridge funding to “float” the use of federal Administrative funds, e.g., Medicaid/CHIP, water*	<ul style="list-style-type: none"> • Provide up-front capital in the form of a low/no interest bridge loan or line of credit ahead of third party payments for states using CHIP Admin funds for lead (State Medicaid agencies) • Similarly, provide up-front capital for states using water Admin funds for lead (State water authorities) 	<ul style="list-style-type: none"> • States • CDFIs / local lenders

* Need to further assess structure and regulatory flexibility



3

LEVERAGE PUBLIC FUNDING WITH GRANTS & BRIDGE CAPITAL: WORKPLAN FOR ACTION (1/2)

Stretch public funding

Research: Analyze opportunity

- > Identify city and state funded programs focused on lead remediation; understand deployment priorities and coverage of high-risk, LMI properties
- > Identify deployment partners and supporting nonprofits; understand potential value of grant capital, e.g., match for remediation work, expanded outreach efforts

Capitalize: Provide Funding

- > Design grant program including both direct and supporting uses of funds, channel partners, and eligible properties
- > Capture metrics including pace of deployment, use of funds, leverage provided by grant capital

Grants for windows

- > Identify communities with high lead risk, with a focus on homes with old windows, and populations with greatest need (e.g., low-income, children in home)
- > Map organizations providing energy efficiency programs for low-income customers (cities, utilities, community nonprofit service providers, banks) and determine where funding can be braided
- > Define short-list of partners through whom funding can be deployed

- > Fund existing players (e.g., through City or a bank) to include windows in broader energy programs and to expand coverage of high-risk properties; utilize donated/discounted windows where possible
- > Track number of units / windows replaced and tenant/homeowner uptake

X 3 LEVERAGE PUBLIC FUNDING WITH GRANTS & BRIDGE CAPITAL: WORKPLAN FOR ACTION (2/2)

Create a state level DWSRF

Research: Analyze feasibility

- > Identify geographies where DWSRF is not implemented *and* where lead in water is a challenge
- > Form a working group with key players in the state to study comparable federal programs and evaluate feasibility:
 - Define capital structure and identify sources for each tranche
 - Identify key roles and determine who can fulfill
 - Test whether and how philanthropic capital could enable such a fund with “new money” to be launched

Design: Adopt strategy

- > Consult outside expertise (i.e., teams who have managed DWSRFs)
- > Develop fund model; establish fund parameters, managers, roles/responsibilities
- > Seek capital and operating commitments from local players
- > Make “go/no-go” decision

Capitalize

- > Prepare to launch the fund; plan capital and grant deployment alongside launch timeline
- > Track uptake, loans deployed and payback rates, fund sustainability

Bridge capital for federal funds

- > Define state requirements for use of federal administrative funds (CHIP, water) and regulatory permissibility of bridge financing
- > Understand timing of third party payment cycles
- > Engage local borrowers and lenders to test for appetite and capacity

- > Define type of up-front capital required/allowed (e.g., term loan, line of credit)
- > Meet with key borrowers (e.g., certified contractors) to design application, underwriting and deployment model

- > Pilot with selected contractors; review demand and performance after 6-9 months and refine program

X SOLUTIONS: SUPPORTING STRATEGIES

Category	Supporting Strategy
<p>4</p> <p>Infrastructure: Invest in resources, information and tools that policymakers and practitioners can use around the country</p>	<ul style="list-style-type: none"> • Build a two-part database in high-lead areas to register rental properties and overlay reported BLL cases
	<ul style="list-style-type: none"> • Capture and organize a central repository of data and case studies on lead-related financing programs
	<ul style="list-style-type: none"> • Build an open source portal for “healthy homes” information and funding sources that can be used and customized in local markets
	<ul style="list-style-type: none"> • Develop an “off-the-shelf” loan program design and underwriting protocol for nonprofit lenders
	<ul style="list-style-type: none"> • Invest in scaling certification and training programs that enable other investments to flow
<p>5</p> <p>Field-building: Invest in networks, collaboration, and information-sharing across a range of geographies, stakeholder types, and strategies</p>	<ul style="list-style-type: none"> • Work with GHHI and others to “double down” on collaborative effort in high-potential regions to share, discuss, customize, and test financing strategies
	<ul style="list-style-type: none"> • Expand the funders network to include national and strong regional players with a strong interest in affordable and healthy homes
	<ul style="list-style-type: none"> • Identify and promulgate strategies for outreach to property owners and large-scale deployment of loan programs
	<ul style="list-style-type: none"> • Support anchor networks to design healthy housing programs that connect to their population health strategies; and
<p>6</p> <p>Advocacy: Focus regulatory and legislative attention to “move the needle” on lead</p>	<ul style="list-style-type: none"> • Fill key research and funding gaps to strengthen other efforts, including ROI calculations for window replacement and PFS outcomes
	<ul style="list-style-type: none"> • Direct advocacy on high-priority issues • Fund effective advocacy groups/networks at the national and state level on above and other issues; build cross-sector coalitions to connect, amplify and expand efforts



4

SUPPORTING STRATEGIES: INFRASTRUCTURE DESCRIPTION

Strategy	Description	Channels and Partners (examples)
Build a two-part database in high-lead areas to register rental properties and overlay reported BLL cases	<ul style="list-style-type: none"> Design and build a database that documents homes in neighborhoods with likely or confirmed high lead risk; match this database with reported cases of children with lead poisoning to identify “hot spots” and prioritize remediation efforts 	<ul style="list-style-type: none"> Local/national foundations (Cleveland/Case Western Reserve and Mt. Sinai/Gund Foundations) Detroit/Kresge and HUD “Detroit Lead Housing Database; RWJF’s DASH
Capture and organize a central repository of data and case studies on lead-related financing programs	<ul style="list-style-type: none"> Translate this research into a shareable resource either by building upon existing resources or standing up a new repository Ultimately this resource could continue to be populated via curated crowdsourcing efforts 	<ul style="list-style-type: none"> Existing aggregators, e.g., EPA’s Water Finance Clearinghouse Build Healthy Places Network
Build an open source portal for “healthy homes” information and funding sources	<ul style="list-style-type: none"> Build an open source portal for “healthy homes” information and funding sources that can be used and customized in local markets 	<ul style="list-style-type: none"> Existing resources, such as Rochester’s <i>theleadcoalition.org</i> City/municipality (eg, City of SF built open source small business portal)
Develop an “off-the-shelf” loan program design and underwriting protocol for nonprofit lenders	<ul style="list-style-type: none"> Many CDFIs have the infrastructure (originating, underwriting, processing, servicing) and expertise to deploy a successful loan program, but competing priorities will prohibit them from thoughtfully design a loan product in a coordinated fashion that supports homeowners with lead remediation The Network can consult with partners to define successful loan type/size and terms, capture successful mechanisms for assessing and managing risk, and ultimately rollout an off-the-shelf tool for CDFIs to implement 	<ul style="list-style-type: none"> Nonprofit lenders (CDFIs, CDCs)
Invest in scaling certification and training programs that enable other investments to flow	<ul style="list-style-type: none"> Provide grant capital to subsidize/support local organizations providing RRP training and certification for contractors; these credentials support the nation’s healthy housing, weatherization, and home performance workforce in conducting home assessments to address health and safety challenges 	<ul style="list-style-type: none"> GHHI NCHH Building Performance Initiative (BPI) – e.g., their new Healthy Homes Evaluator certification



4

SUPPORTING STRATEGIES: INFRASTRUCTURE WORKPLAN FOR ACTION (1/2)

Technology Solutions (Databases, Portal)

Research: *Best practices*

- > Coordinate with local partners (government, foundations, universities, health providers, etc.) to identify sources of necessary data (housing stock, lead poisoning cases, etc)
- > Conduct scan of existing resources (databases, portals, etc.)
- > Assess technology options, leveraging lessons learned from like initiatives
- > Assess options and develop “short-list” to ultimately select tool(s)

Design: *Build/Test*

- > Work with relevant specialists to prototype, design, and build tool
 - Test data flows, connectivity across systems, etc.
 - Determine owner and “home” of the tool, users, access levels
- > Develop “beta” and share across Network / partners for testing and feedback

Deploy: *Launch*

- > Roll out new tool as appropriate in local context
- > Launch solution
- > Track key metrics, including visitors/users/contributors
- > Deploy ongoing maintenance plan, including periodic improvement



4

SUPPORTING STRATEGIES: INFRASTRUCTURE WORKPLAN FOR ACTION (2/2)

	Direct Implementation	Indirect Funding Partner
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Community lender support

- Conduct listening tour with CDFIs / community lenders to understand capacity, constraints, and appetite for an off-the-shelf loan product
- Work with partners to design product, capturing criteria for loan type/size and terms
- Manage feedback sessions, education, and roll-out of product with CDFIs

- Contract research group (e.g., academic institution) to conduct the research, analysis, and ultimately design and implementation of a new product for CDFIs
- Serve as hands-off funder

Training & Certifications

- N/A

- Identify organizations that provide training and certification; work with them to define funding gaps, and identify where subsidies could scale their programs
- Provide grant capital to local agencies / nonprofits who deliver relevant lead abatement trainings to contractors and others (RRP, etc.)



SUPPORTING STRATEGIES: FIELD-BUILDING DESCRIPTION

Strategy	Description	Channels and Partners (examples)
Work with GHHI and others to “double down” in high-potential regions	<ul style="list-style-type: none">Partner with leading organizations to share and test findings, track progress across regions, and maximize efforts	<ul style="list-style-type: none">Leading organizations addressing lead (GHHI, NCHH, community/national foundations)
Expand the funders network	<ul style="list-style-type: none">In addition to the core group, include national and strong regional players with a strong interest in affordable and healthy homesWork to formalize/deepen the collaborative work process	<ul style="list-style-type: none">National foundations and other relevant robust organizations (e.g., Kresge, Ford)
Advance the discussion and analysis to shift ROI calculations in critical programs	<ul style="list-style-type: none">Promote and support efforts that push for windows replacement to include health benefits in addition to energy savingsStay close to Pay for Success efforts and continue to research the feasibility of calculating savings via educational and health outcomes over 5-10 years	<ul style="list-style-type: none">State/municipal governmentGHHI, Social Finance (PFS)
Partner with anchor networks, particularly health systems	<ul style="list-style-type: none">Build and promulgate a community benefits toolkit for lead remediation as a part of their “healthy community” investments	<ul style="list-style-type: none">Anchors (hospitals / health systems, universities, corporates)(e.g., Democracy Collaborative’s <i>Hospitals Aligned for Healthy Communities</i>)
Develop a best-practice model for homeowner and small property owner outreach and engagement	<ul style="list-style-type: none">Support efforts in high-priority cities where lead is a major challenge and community buy-in is critical for participationBuild on experience of organizations / initiatives who have experience “going door to door” with lead initiatives	<ul style="list-style-type: none">Housing organizations and funders (e.g., Enterprise Community Partners/Cleveland)State/local programs (e.g., ClearCorps/Detroit)



SUPPORTING STRATEGIES: *FIELD-BUILDING* WORKPLAN FOR ACTION

Strategy	Actions
Work with GHHI and others to “double down” in high-potential regions	<ul style="list-style-type: none">• Share and discuss this work with national and regional collaborative leaders• Disseminate across local/regional coalition members to increase awareness• Customize, embed and test financing strategies as part of local/regional efforts• Develop system to track progress and lessons learned; share out across regions• Convene/connect leaders and practitioners to understand opportunities and progress
Expand and formalize the funders network	<ul style="list-style-type: none">• Identify and contact national and regional funders with a strong interest in affordable housing development and preservation, energy efficiency, and child health and education; identify areas of shared interest/overlap• Develop a plan to formalize/deepen the collaborative work process across the Network and with outside partners<ul style="list-style-type: none">– Designate “owner” of network operations/communications– Establish calendar and goals; consider sub-groups on specific topics of shared interest as part of strategy execution
Advance the discussion and analysis to shift ROI calculations in critical programs	<ul style="list-style-type: none">• Conduct research/analysis, develop educational materials, and promote/publish resources that clearly define the health benefits to windows replacement• Consider funding targeted research/analysis on quantification of long-term educational, workforce, and criminal justice outcomes attributable to lead remediation, along with engaging key agencies in selected geographies to test willingness to fund
Partner with anchor networks, particularly health systems	<ul style="list-style-type: none">• Engage network leaders and seek to participate in anchor convenings to share findings and discuss potential structures and partnerships in communities• Design potential financing and programmatic initiatives in partnership with networks or individual institutions in target communities; match to funder network members in place
Develop a best-practice model for homeowner and small property owner outreach and engagement	<ul style="list-style-type: none">• Interview leaders of resident-inclusive efforts, including those involving door-to-door or other neighborhood outreach; identify best practices for identifying, contacting and engaging property owners and the infrastructure needed to sustain and expand• Compile and share findings; work with select community organizations to scale strategies



SUPPORTING STRATEGIES: ADVOCACY DESCRIPTION

Strategy	Description	Channels and Partners (examples)
Direct advocacy on high-priority issues	<ul style="list-style-type: none">• Unlock new sources of capital for creating lead-safe and lead-free homes by promoting and advocating for:<ul style="list-style-type: none">– Neighborhood Homes Investment Act (NHIA; provides single family housing tax credit similar to LIHTC)– State level lead testing and remediation requirements (e.g., MA model)– Flexible uses of funds, including covering window replacement with energy funds (WAP, LIHEAP); covering water line replacement with housing funds (HUD)– Inclusion of health savings to calculation of ROI for window replacement in weatherization/ energy efficiency programs– State use of CHIP funds/HSIs– Required use of dust-wipe test and lead clearance in all possible programs– Expansion of Fannie/Freddie “Duty to Serve” programs for affordable housing	<ul style="list-style-type: none">• Community development / affordable housing nonprofits (e.g., Home by Hand / New Orleans)• State / municipality governments• Environmental health organizations• Energy / utility companies
Fund effective advocacy groups/networks at the national and state level	<ul style="list-style-type: none">• Provide grant capital for initiatives and capacity to support the above advocacy efforts (and beyond)• Build cross-sector coalitions to connect, amplify and expand efforts	<ul style="list-style-type: none">• “On-the-ground” community development organizations who meet the needs of home/property owners (e.g., Elevate Energy)

X 6 SUPPORTING STRATEGIES: ADVOCACY WORKPLAN FOR ACTION

Strategy	Menu of Actions
Direct advocacy on high-priority issues	<ul style="list-style-type: none"> • Conduct research and analysis to further advance the momentum in advocating for the changes / adoption of new initiatives (e.g., calculating health savings ROI, state use of CHIP) • Partner with organizations leading the charge on various initiatives (e.g., Home by Hand focused on driving NHIA), providing advocating and information disseminating support • Develop perspective on subject area (e.g., dust wipe tests) through a research and interview campaign; publish findings and advocate with a range of partners (City, developers, housing organizations)
Fund effective advocacy groups/networks at the national and state level	<ul style="list-style-type: none"> • Identify key players on the ground making the connections and supporting community members; conduct a listening tour to identify their funding needs • Determine priority themes and uses of funding, provide grant capital to select organizations with significant potential for impact in these areas

X AGENDA

Project Overview

National Context

Landscape Research

Solutions for Philanthropy

Scale & Geography

X EXECUTING STRATEGIES IN MULTIPLE “FOOTPRINTS”

Most of the strategies we have identified can be implemented at a local level, but benefit from national scale for both knowledge building and infrastructure investment



National Scale



Local/Regional Scale

Strategy

Strategy	National Scale	Local/Regional Scale
Direct investment through loans or credit enhancement	<ul style="list-style-type: none"> • Design a range of vehicles/deal structures that “work” for key project types and adjacent programs • Capital can be aggregated at scale from multiple sources and risk can be spread on a larger base of loans 	<ul style="list-style-type: none"> • Many financing intermediaries and partner organizations operate at a regional level with distinct preferences and requirements, as well as unique capacity building needs
Platforms and tools <ul style="list-style-type: none"> • Data collection • Repository • Portal 	<ul style="list-style-type: none"> • Investment in design and development of tech tools benefits works best at scale 	<ul style="list-style-type: none"> • Will need to implement differently in place depending on the primary user base (e.g., large agencies vs. small nonprofits) and existing infrastructure
Programs <ul style="list-style-type: none"> • Certification and training • Outreach 	<ul style="list-style-type: none"> • Universal best practices and standardized models can benefit all communities 	<ul style="list-style-type: none"> • Will need to implement differently based on the target audiences, existing channels, and local policies

X TAILORING STRATEGY IN A PLACE

The most viable and compelling strategies – and “where to start” – will vary by city and region depending on several key factors

Key Factors	Considerations	Key Implications
<p>What is the scale, concentration and mix of lead hazards?</p>	<ul style="list-style-type: none"> • Availability of reliable data on housing type, age, status; water line location and status • Relative prevalence of lead hazard from housing vs. water • Prevalence of small/mom-and-pop property owners vs. larger multi-family 	<ul style="list-style-type: none"> • Different target audiences and channels to reach each of them
<p>How robust is the ecosystem of partners and intermediaries?</p>	<ul style="list-style-type: none"> • Financial intermediaries (CDFIs, other nonprofit lenders, banks) actively financing affordable and LMI housing deals • Programmatic partners advising and working with each type of property owner 	<ul style="list-style-type: none"> • Ability to work with existing players, or a need to establish a new fund and build capacity/create new infrastructure
<p>What is the alignment with political leadership?</p>	<ul style="list-style-type: none"> • Overall tenor and direction of municipal, county and state priorities • Policy priorities in adjacent areas, e.g., affordable housing preservation, healthy homes, clean water and sewer/septic management, energy efficiency • Timing relative to election cycle, budget planning 	<ul style="list-style-type: none"> • Potential for aligning local subsidies, policies – or need to create incentives without them • Ability to “push” key players to invest effort • Ability to scale with other efforts (e.g., AHP) vs. need to create scale through strategies

GLOSSARY

BLL and EBL – Blood lead level and elevated blood lead

CDFI – Community Development Financial Institution

CHIP – Children’s Health Insurance Program; a public health insurance program for children whose families earn too much to qualify for Medicaid

LCR – Lead and Copper Rule; federal rule limiting the concentration of lead and copper permitted in public water lines

LIHEAP – Low Income Home Energy Assistance Program; funded by HHS as a direct subsidy for home energy costs, with up to 15% allowed for long-term energy improvement upgrades

LMI – Low-Moderate Income

LSL – Lead service line (water line)

NMTC – New Market Tax Credit

RRP – EPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified and adhere to lead-safe work practices.

SEP – Supplemental Environmental Project; a settlement agreement with a corporation for failure to comply with an environmental law to fund a project with environmental or public health benefits in the affected community

WAP – Weatherization Assistance Program; a DOE program that provides low-income homeowners with funds for weatherization improvements; several states permit windows/ doors as a covered expense