Accelerating Lead Remediation through Private Financing Strategies  
Lead Remediation Funders Network  
Executive Summary  
June 17, 2019

Context

Lead risk endangers a large number of properties and families nationwide: Over 24 million homes have significant paint hazards—3.6M of which house young children—and an estimated 10 million have lead service lines.

A network of interested funders has been meeting informally over the last year to share knowledge and practice, and this research effort is an opportunity to anchor the network’s future priorities and actions.

The JPB Foundation engaged Next Street to carry out a research program in late 2018 with a goal of accelerating the scale and pace of investment in lead remediation, leading to a meaningful reduction in the health, learning, and life impacts of lead exposure in our most vulnerable communities.

The research was designed to complement other work in the sector and to focus on opportunities to utilize philanthropic capital without the need for major legal or regulatory change. The scope of work included:

- Researching the public and private financing mechanisms, channels, and structures that can be utilized – whether they are used for lead remediation today or not
- Identifying the audience segments, partners, and financial intermediaries for, with or through whom the financing can flow
- Identifying supporting strategies for infrastructure, field-building and advocacy that can also be pursued in parallel – and could enhance the pace and impact of financing strategies

The network’s hope is that funders and leaders in local communities will use this body of work to identify the strategies that are most relevant and achievable, and that our research and assessment will guide their efforts and investments to the highest-value and highest-impact interventions.

Solutions to Address Lead Hazards

Our research looked across public and private financing efforts to identify where private funding can activate and leverage existing capital, and to catalyze new capital to enter the field. We concluded that there are several distinct financing strategies that can draw flexible, risk-tolerant capital into larger-scale renovation projects, as well as stretch government funding to cover lead remediation. These include:

- Lending and credit enhancement to include lead remediation in subsidized mortgage and affordable housing preservation programs, working closely with the nonprofit lenders and
agencies who are already structuring complex projects and braiding funding; there are also opportunities to form new partnerships including corporate partners (see Exhibit 1);

- New revolving funds that draw state and private capital into a flexible loan program focused on lead service line replacement for municipalities;
- Bridge funding that allows providers to utilize a range of government programs where payments typically lag the work by 6-9 months; and
- Grants that extend energy efficiency programs to cover window replacement.

In addition to financing strategies, funders can work to create infrastructure and build the field in new ways. Opportunities include:

- Investing in localized data aggregation and analysis to identify and prioritize lead hazards;
- Building a repository for best practices, case studies, and off-the-shelf tools and financing vehicles, along with an open-source portal for information and referrals that can be customized for cities and regions;
- Identifying and promulgating strategies for outreach to property owners and large-scale deployment of loan programs;
- Supporting anchor networks to design healthy housing programs that connect to their population health strategies; and
- Filling key research and funding gaps to strengthen advocacy efforts, including greater flexibility in the use of energy and health funds, stronger compliance requirements, and the adoption of new tax credit programs.

**Experience and Insights in Key Sectors**

We undertook a deeper investigation of the hazards and dynamics of remediation activities and financing in several sectors, including Housing, Energy, Water, and Health. We also looked at the evolution of anchor institution investments in community benefits.

**Housing**

Lead risk in housing is concentrated in certain property types and geographies. These include:

- Smaller buildings (less than 4-6 units) that are independently owned and not part of federally subsidized rehab programs, which are required to address lead as a condition of financing;
- Older cities in the Eastern US and through the Rust Belt whose housing stock predates lead regulations and has not been heavily gentrified; and
- Cities and neighborhoods with lower property values and a more challenging real estate sector, and where new investment in properties is not economically viable.

Financing solutions for these properties need to incentivize property owners to carry out lead remediation, and also need to reflect the challenging economics of investment. As a result, successful financing vehicles typically offer flexible terms that lower the cost of debt and delay repayment. Loan structures can include low or no interest and higher loan-to-value ratios (LTV), and may also push out payments until sale or refinancing of the property; this allows property owners remediate the lead but protects their operating margins and personal credit. Examples of similar vehicles include programs such
as “Get the Lead Out” in Massachusetts, Oregon’s Clean Water Revolving Loan Fund program for replacing old septic systems, as well as the Treasury’s Capital Magnet Fund, which is being deployed by CDFIs for affordable housing preservation using a range of subsidy strategies.

Investing in these financing strategies requires partnerships with nonprofit and potentially other lenders (only a few CDFIs finance the smaller properties with greatest lead risk) or state Housing Finance Agencies, who can serve as intermediaries for these programs. These partners are often already financing housing rehab projects with target properties that could serve as the base for lead programs.

In many communities there are a range of local nonprofit agencies in the housing and energy sectors who work on the ground with target property owners to source and braid funding for repairs and improvements. These partners can be valuable channels for identifying properties and incorporating lead financing into planned projects. Examples include Elevate Energy in Chicago and Community Housing Solutions in NC.

Energy
Window replacement can remove much of the lead hazard in a property and is considered one of many strategies for increasing a property’s energy efficiency. However, most existing energy-related programs, including both government weatherization programs and on-bill programs sponsored by utilities, are driven by energy savings, and window replacement does not meet the return-on-investment (ROI) threshold. This means that the energy savings from window replacement are lower than the expected energy savings over several years, and therefore the financing vehicle does not work. As a result, lead remediation is unlikely to happen at scale through traditional energy efficiency programs until agencies agree to expand the ROI calculation to include health and other savings (see below for discussion of Advocacy priorities).

There are some energy and weatherization programs in which municipalities or utilities subsidize the cost; Where windows have been included in a program there has typically been “new revenue” to pay for them. Examples include Chicago’s TIF NIP and Illinois’ bond issue for its CLEAR-Win program. Where politically and economically feasible, these programs can be effective, though they function like grant programs that do not “recycle” capital and therefore can be costly. In addition, many popular rebate and grant programs can have technicalities that can be barriers for small property owners, for example, a city disallowing a home repair grant because of the owner’s outstanding parking tickets.

Outside of traditional Energy-related programs, windows can be included in larger scale housing rehab programs, as described above.

Water
Full lead service line (LSL) replacement is the only effective way to reduce lead hazard in water, and therefore requires investment at both the municipal/utility and the property level. The coordination of the players and accessibility of the lines can often be complex at the local level – and challenging for individual property owners to influence; cities often lack detailed records of the location and composition of old lines, and property owners may be resistant to line replacement on their properties.
At the state level, there is limited funding for water projects and LSLs are often not prioritized within administrative codes as authorities seek to keep water rates affordable while addressing the most pressing clean water issues. Some states have been attempting new formats for taking on large-scale water projects, including:

- Creative use of State Revolving Funds (SRFs), including Wisconsin’s use of its Drinking Water SRF to offer principal loan forgiveness to access private property; individual municipalities in Wisconsin have set up a scoring system to prioritize LSL replacement in low-income communities and households with children;
- Use of a Linked Deposit program in Iowa that makes bank deposits with state funds that allow banks to lend to property owners at low, below-market rates; and, as noted above; and
- In Oregon, the CDFI Craft3 finances a clean water loan program on behalf of the state’s CWRLF to replace failing septic systems using flexible capital (up to 120% LTV) and deferred payments.

Health
Over the last decade there has been an acceleration in the focus on and funding for social determinants of health as part of Medicaid; this has been driven by a series of shifts in the Medicaid payments themselves along with increased flexibility through special waivers and funding plans such as the Delivery System Reform Incentive Payment program (DSRIP) and the Health Services Initiative (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. These organizations, which are taking financial risk for health outcomes, may choose to invest in healthy housing as a social determinant of health.

CMS has been advocating the use of customized State Plan Agreements (SPA) under Medicaid’s HSI that do not require a waiver and allow states to invest in a wide-ranging set of interventions for low-income children’s health, including lead-related work; however, while many states have pursued an SPA, only several have focused on lead due to competing priorities. States who do choose to utilize HSI resources for lead have great flexibility in the use of funds for home repair, and Michigan has focused its investment. Nonetheless, there have been challenges to utilizing HSI funds, including a shortage of certified contractors as well as a lag in the flow of federal funding relative to the timing of the work.

DSRIP is part of Medicaid’s Section 1115 waiver program that gives states additional flexibility for designing their Medicaid or Child Health Insurance Plan efforts. Implemented in eight states, a majority of DSRIP 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 and quality improvement, population health, and Health Information Systems infrastructure. DSRIP has not been used for housing, and a lead-related DSRIP proposal in New York...
was not implemented because the health savings were not great enough relative to other uses of the funds.

Regardless of the funding mechanism, nearly all of the health-funded lead remediation today is triggered only by a case of elevated Blood Lead Level (BLL). As noted above, some states have been willing to prioritize lead remediation as a use of HSI funding, but they have typically prioritized these funds for homes identified by the Department of Health based on reported BLL cases, similar to the use of traditional Medicaid reimbursement and 1115 funds. As a result, financing of lead remediation through health care programs is likely to continue addressing lead in homes after significant exposure, rather than as a preventive strategy.

**Anchor Institutions**
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. Hospitals 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.

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 to develop robust programs that address a range of social determinants and socioeconomic drivers through both Community Benefits and Impact Investing strategies. Sector leaders have already launched strategies to invest in local housing development and preservation, including Johns Hopkins University, University of Pennsylvania, and University of Chicago.

Many institutions offer some type of neighborhood improvement support in their facility footprints, but 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, health anchors’ interest in broader community investments is likely to grow as they take greater financial risk for the populations they serve and as the uninsured rates decline and community benefits need to expand elsewhere.

**Conclusion**
The sector-level research led us to several insights about the evolution of financing strategies for lead:

- Housing mortgage and renovation programs represent an important opportunity to finance lead remediation at scale – and have the potential to address both paint and water hazards.
Because many public remediation programs prioritize properties that have already contributed to lead poisoning cases, privately-capitalized and/or -led programs offer a mechanism for preventive action in a broader range of homes.

Nevertheless, public funds play an important role to lower borrowing costs and attract private investment (see Exhibit 2); larger-scale public funding through bonds, revolving loan funds, and other means will remain an important source of support, with an opportunity to utilize these strategies for expanding reach and sharing risk.

**Path Forward**

This report was intended as a first step to build a central repository of experience and a range of strategies with potential to accelerate investment in lead remediation. The network anticipates continuing to partner with other funders and practitioners around the country as dialogue and experimentation continue.

In the near term, the funders will be formalizing and expanding the Network to include leading funders in adjacent areas such as affordable housing development and preservation, energy efficiency, and child health and education. They hope to collaborate across sectors as they design and test financing solutions, and to work together to share and advocate for public and private investments more broadly.

The Network will also be working closely with other sector partners to align investments to their work on regulatory change and advocacy, and to prepare for the next wave of financing needs as their efforts at the federal and state level create new opportunities.

Network members are committed to tracking their own and the sector’s progress in lead hazard remediation and will be publishing periodic updates on successes and lessons learned.
**Exhibit 1**
Overview of Financing Solutions for Lead Remediation

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<th>Strategy</th>
<th>Financing Mechanism</th>
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| Work through lenders and agencies already financing small, unsubsidized properties | • 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 |
| Replicate and capitalize stand-alone lead programs | • 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 |
| Provide grants and bridge capital that leverage public funding | • Stretch public funding by providing matching grants and forgivable loans alongside federal, state and local programs
| | • 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, wateretc |

**Exhibit 2**
Sources and uses of public funding to home/infrastructure improvement programs

- Subsidized loan funds through (or in partnership with) HFAs or other intermediaries; may include a loan forgiveness provision
  - Massachusetts/Get the Lead Out
  - Detroit Home Mortgage
  - Wisconsin Safe Drinking Water Loan Program
  - Massachusetts/Home Funders Program
- Pass-throughs of federal funds (could also include bond proceeds or general revenue) sometimes with matching low/no interest loans from banks or CDFIs using CRA funds or NMTC equity
  - Chicago/TIF NIP
  - Chicago/CLEAR-Win
  - Medicaid waivers/CHIP HSI
- Grants to reimburse the cleanup of environmental hazards
  - Milwaukee/Brownfields
The following Foundations participated in activities coordinated by funders that support organizations working on lead poisoning prevention. Those activities include but are not limited to meetings, conference calls, review of the scan, and/or participation in the interview process.

The JPB Foundation, New York NY
The Annie E. Casey Foundation, Baltimore MD
Cleveland Foundation, Cleveland OH
Community Foundation for Greater Buffalo, Buffalo NY
Community Foundation of Greater Flint, Flint MI
The Community Foundation of Herkimer & Oneida Counties, Utica NY
Environmental Grantmakers Association, New York NY
Fred A. and Barbara M. Erb Foundation, Royal Oak MI
Grantmakers in Health, Washington DC
Health and Environmental Funders Network, Bethesda MD
The Heinz Endowments, Pittsburgh PA
The Joyce Foundation, Chicago IL
C.S. Mott Foundation, Flint MI
Mt. Sinai Health Care Foundation, Cleveland OH
New York Community Trust, New York NY
Passport Foundation, Louisville KY
The Pittsburgh Foundation, Pittsburgh PA
Robert Wood Johnson Foundation, Princeton NJ
Roy A. Hunt Foundation, Pittsburgh PA
Singing Field Foundation, Waltham MA
Spring Point Partners LLC, Philadelphia PA
The Water Foundation, Sacramento CA