

THE OPPORTUNITY

Today, we have an unprecedented opportunity to eliminate the solvable problem of lead in drinking water due to several developments: President Biden's goal of replacing 100 percent of the nation's estimated ten million lead pipes, the American Rescue Plan Act (ARPA) many municipalities are using to fund lead pipe replacement, the passage of the Infrastructure Investment and Jobs Act (e.g. the Bipartisan Infrastructure Act or BIL) with \$15 billion for lead pipe replacement, and the adoption of new federal lead and copper regulations at the end of 2021. That said, without key changes in policies, procurement, data management, and practices - and the adoption of innovative strategies - we may miss the true potential of this moment.

THE NEED

Smaller and medium-sized municipalities often don't have the technology and tools to clearly locate and map their lead lines, update their data systems, digitize their paper records, integrate data in real time, access public funds, gain the trust of the public, or prioritize replacement in the most burdened neighborhoods.

While replacing one pipe may seem simple, replacing ten million of them in thousands of communities is not. Municipal governments need fast and cost-effective ways to identify where their lead lines are, digitize and manage their data, communicate effectively to the public, prioritize burdened populations and neighborhoods, center the community's needs, and hire, train, and procure contractors locally to carry out replacements.

The City of Newark replaced 100 percent of their lead pipes in record time - with leadership at all levels of their local government, critical funding that included municipal impact bonds, and 70 percent of their program costs staying in community through local hiring and workforce development.

The question is... *How do we replicate Newark's success in 11,000 additional communities across the country who also have lead pipes?* EPIC is focused on answering that question and ensuring 100 percent of lead pipes are replaced in the next ten years.



How to elevate and support local leaders?

*Rebecca Wright is a former Assistant Engineer for the City of Chelsea, Massachusetts - and EPIC's Lead-Free Water Challenge partner, 2021 to 2022. Rebecca won the WaterNow Emerging Leader award for championing the city's lead pipe replacement. Leadership is a key factor in success of lead pipe replacement so *how do we elevate and support more leaders like Rebecca?**

Lead-Free Water Program



OUR SOLUTION

At EPIC, we believe that this country can replace all of our lead pipes in ten years. Our goal is therefore simple: we create and support policy change, programs, innovation, new technologies, capacity building, and initiatives that result in faster replacement of toxic lead water pipes. We support strategies that replace pipes *efficiently* so the funding goes further and *equitably* so that overburdened communities are prioritized and the cost burden is not passed on to ratepayers.

OUR STRATEGY

Technical assistance

Support for municipal water utilities and communities, connecting them to service providers, funding opportunities, lessons learned, tools and templates, new technologies, and peer networks.

Analysis and learning

Research, data collection, and analysis to understand what's working and not working, best practices, which communities are receiving funding and which ones are being left behind, how funds are being spent, and where replacement is happening the fastest and why.

Policy change and innovation

Advancing policy change and innovation at the local, state, and federal level to ensure we achieve our goal of replacing all lead pipes in a decade.

How to spur innovation?

To replace all lead pipes in a decade, we need to think outside the box - not only elevating case studies and best practices, but also spurring new ideas and innovations, like these:

- **Contracting and procurement:** Public Private Partnerships (P3s) and pay for success contracting are innovative ways to create efficiencies of scale and positive price pressure.
- **Local contracting and procurement:** Bids for services are an opportunity to establish good contracting and procurement policies. Creating workforce development programs and employing local contractors, laborers, and small businesses are ways to ensure that communities see real benefits.
- **Funding mechanisms:** Impact bonds represent a borrowing and procurement strategy that worked for the City of Newark, and could work for more cities who are considering municipal bonds.
- **New technologies:** Data management, record keeping, identification, and replacement of lead service lines all benefit from emerging and new technologies if we can make them more available to the communities who need them.

LEAD-FREE WATER INITIATIVES

There is no safe level of lead - and no one should live a moment longer with toxic lead pipes carrying their drinking water. The problem is solvable - with the right resources, collaboration, tools and technologies, and innovative strategies. EPIC believes that full service line replacement, or replacing both the public and private sides of the line, is possible in ten years.



Lead-Free Water Challenge

Launched in 2021, the [Lead-Free Water Challenge](#) is EPIC's pilot technical assistance program designed to help boost lead service line replacement in small to medium-size communities. We partnered with [WaterPIO](#), [Center for Geospatial Solutions](#), and [Blue Conduit](#) on our initial pilot project.

In 2022, EPIC launched a [Funding Navigator](#) to help utilities that serve overburdened communities secure public funds for water infrastructure projects, including lead service line replacement. Through this project, EPIC will assist municipalities access funding for lead service line replacement and match them with service providers.

EPIC's technical assistance model:

- Connect municipalities with service providers who have expertise on data management and technology, finance, communications, and community outreach.
- Work with municipalities in identifying a funding strategy and a plan to access public funds for their lead service line replacement programs.
- Facilitate and convene conversations and planning with community partners, funding institutions, elected officials, and others.
- Encourage municipalities to focus on hiring local contractors, developing the local workforce, and utilizing minority and women-owned businesses in addition to partnering with community groups.
- Give municipalities access to innovative tools, technologies, and templates coming out of our partnerships and initiatives, including EPIC's [Water Data Prize](#).
- Make other resources available such as a [model lead-free resolution](#), a [right to entry ordinance template](#), [principles of equitable lead service line replacement](#), and others.



LEAD-FREE WATER INITIATIVES

Lead-Free Water Municipal Peer Network



We coordinate a Lead-Free Water Municipal Peer Network to ensure that best practices and lessons learned reach the municipalities who need them. We hold periodic webinars on practical topics related to lead service line replacement and ask utilities and communities to join and share in these discussions.

Lead-Free Water Leaders



As we work with more and more local water leaders through a growing peer network and our technical assistance model, we are simultaneously building a network of local water sector leaders. We will continue to help elevate and support these leaders by recommending them for training, recognition, and other opportunities.

Lead-Free Water Movement



In partnership with community-based organizations and other groups, we are working to push more elected officials to adopt a Lead-Free Water Municipal Resolution to recognize the importance of lead-free water for their residents and to create resolve and momentum that leads to real action. We aim to see 50 elected officials over the next year pass a lead-free resolution in their communities, holding these leaders and their municipalities accountable for getting the job done.

ANALYSIS AND LEARNING

With so much new federal funding and regulation in the backdrop, EPIC will be closely monitoring lead service line identification and replacement programs around the country to see what's working and what's not working; which communities are replacing lead pipes the fastest, most efficiently, and most equitably; how federal lead funding is flowing (or not) to states and communities; how funding is being allocated (e.g. identification versus replacement and forgivable loans versus loans in the case of SRFs); and how costs are being controlled or not.

In 2022, EPIC and Environmental Defense Fund are partnering to track federal funding for lead service line replacement through State Revolving Funds. We are aiming to understand how and where Drinking Water State Revolving Funds (DWSRF) for lead service line replacement are being distributed and which communities are benefitting - and which are not.