



CITY OF CHICAGO



DEPARTMENT OF WATER MANAGEMENT

**Statement of Commissioner Andrea Cheng**  
**City of Chicago, Department of Water Management**

**before the**

**U.S. Senate Committee on Environment and Public Works, Subcommittee on Fisheries, Water and  
Wildlife**

**Regarding Lead Service Line Replacement Initiatives**

**Chicago, Illinois**

**April 22, 2022**

Chair Duckworth, Ranking Member Lummis, and Members of the Subcommittee: Thank you for inviting me to today's hearing regarding lead service line replacement initiatives. Thank you, Chair Duckworth, for shining a spotlight on Chicago and our home state of Illinois today. And thank you for your leadership and unwavering commitment on the Drinking Water and Wastewater Infrastructure Act of 2021, and ensuring that the bipartisan Infrastructure Investment and Jobs Act includes funding for lead service line replacement. This historic investment by the federal government can jump-start our work in Chicago, and in states and municipalities across the country. Though the journey is far from over, it is an honor to appear before you today to share our progress, and what needs to be done. Access to clean water should not be out of reach for any of our residents.

When it comes to lead service lines (LSL), Chicago, unfortunately, has the largest number in the country, with approximately 380,000 in a dense urban environment.

Despite that, we have been in compliance with the EPA's lead regulations since shortly after the Lead and Copper Rule was put in place in 1991. Chicago is a leader in lead research and testing, focusing on corrosion control treatment. In fact, we'll be switching to a new corrosion control treatment at the end of 2023 to continue to reduce lead in water. Chicago also has one of the largest databases of lead testing in the U.S., with over 100,000 free lead testing kits mailed out to residents.

But corrosion control is only one part of controlling lead in water. It is time for removal of our lead service lines here in Chicago. And that is what Mayor Lightfoot is doing. Addressing this legacy issue head on is her top priority for our Department of Water Management (DWM).

As a result, in 2021 we created an ambitious lead service line replacement plan here in Chicago to address this legacy issue. However, the costs associated with lead service line replacement are significant: approximately \$15,000 to \$26,000 for a full lead service line replacement, including both the private side and the public side. And we know that other cities who have had the most success with lead service line replacement offered some level of assistance for the private side of the lead service

line. Again, we are grateful for this new and historic federal investment to help with our replacement efforts.

To date, Chicago has rolled out three lead service line replacement (LSLR) programs: a Homeowner Initiated LSLR Program that waives permit fees for those who do their own replacement; a one-block pilot of LSLR alongside water main replacement that includes free LSLR for both the private and public side; and a CDBG-funded Equity LSLR Program that provides free LSLR for both the private and public side for low-income homeowners. Chicago's Equity LSLR Program is unique in that it focuses entirely on low-income homeowners with prioritization for those who have children in the home or elevated lead levels. These are homes that are most impacted by lead service lines and least able to afford to replace them.

Next, we are in the process of starting a program for free, full LSLR in daycares. Replacing a LSL in a daycare doesn't just impact one family, it impacts many children, so this is an important initiative. Chicago has also been actively working on our LSL inventory since 2016 by having our field staff note material properties during repairs and capital work. Our goal is to have a database and online interactive LSL inventory by 2023. In January 2023 our Break and Leak LSLR Program will be in full force, replacing the full LSL any time there is a leak or break in a line. We expect about 4,000 to 5,000 breaks or leaks per year on lead service lines, and each of those will become an LSLR. We will also be expanding our LSLR alongside water main and sewer main replacements in 2023. Finally, DWM is looking at where and when to replace lead service lines on a block-level with an equity lens, using numerous factors, including income, environmental justice, vulnerable population, and other factors. While logistically challenging, doing LSLR along an entire block has been shown to reduce overall costs for many communities.

Based on what we have learned so far, there are three main challenges for LSLR in Chicago, which we know many other municipalities face as well: (1) funding (2) regulatory approval for trenchless construction, and (3) convincing homeowners to participate in replacement.

#### (1) Funding

- Chicago estimates that to replace its lead service lines will cost \$8 - \$10 billion over the next 50 years.
- This huge cost is also complicated by the fact that in Chicago, like many cities, the water service line is partially owned by the homeowner and partially owned by the City.
- The Federal funding from the IIJA is a welcome and much-needed boost, and we appreciate the Environmental Protection Agency's focus on equity in allocation of funding.
- We are grateful that the new LSLR funding being channeled through the State Revolving Loan Fund will allow for 49% principal forgiveness on low-interest loans for LSLR if the recipient meets the state definition of a "disadvantaged community." Proceeds from such forgivable loans could be used to pay for private side replacement. Surprisingly, Chicago does not currently qualify for these forgivable loans because our population is too large. We appreciate Illinois EPA's partnership thus far in exploring a change to this definition and look forward to continuing a dialogue on this important issue to ensure that our residents who need it most benefit from this investment.

## (2) Regulatory approval for trenchless construction

- We often get asked, “Why is the cost of LSLR in Chicago so high?” Comparing one city’s costs for LSLR to another city’s costs for LSLR can be like comparing apples to oranges depending on what they consider part of the LSLR scope. In Chicago, our cost of \$15,000 to \$30,000 includes public side replacement, private side replacement, water meter installation (if one is not already present), private sewer drain replacement, basic restoration outside the home, and patching up where the entry hole is dug in the basement. However, not all cities include restoration or private side costs in their estimates, and most cities do not have to perform private sewer drain replacement as part of LSLR. This is because of differences in urban density and state regulations.
- In Illinois, the Illinois Department of Public Health (IDPH) regulates water service lines and private sewer drains and current regulations require that water service lines and the private sewer drain be separated spatially or replaced with a more watertight material, regardless of surrounding conditions. Like in many older cities, the lead service lines being replaced in Chicago are often closer laterally to the private sewer drain, triggering a requirement to move or replace the private drain. This is so disruptive to a homeowner’s property that some turn down completely free LSL replacement because of it. In addition, it adds 35-50% to the overall LSLR cost.
- Chicago is working with the IDPH to explore options for maximizing the public health benefit from water line - sewer drain separation while acknowledging the significant public health benefit from LSL replacement. Last month, IDPH announced a newly created, state-wide variance so that additional nearby sewer infrastructure doesn’t have to be replaced as a part of every LSLR as long as the private sewer drain is intact and not leaking. The language is being finalized and is expected shortly. Getting a final version of the variance will be a huge step for Chicago’s LSLR programs, allowing us to use less expensive and faster trenchless construction techniques. Trenchless techniques also help us save trees compared to traditional trenching.

## (3) Convincing homeowners to participate

- Even with these faster and less disruptive construction techniques, there is no doubt about it – LSLR is like having a small construction project on each resident’s property. Even the trenchless technique still involves a small pit in a resident’s basement and in the parkway or street. Homeowner education is critical to success.
- Both with our Equity LSLR Program and our LSLR-Water Main Replacement Pilot, Chicago has found it difficult to convince a homeowner to participate. Chicago is focusing on reaching residents where they are – with on-the-street community meetings in multiple languages, programs at neighborhood libraries, and more.
- Chicago is working hard on learning what works to motivate Chicagoans to participate in LSLR programs. Examples such as Newark’s Right of Entry ordinance show that water utilities need to be innovative and evolve programs over time.

While there are challenges, there is the opportunity at this moment to make real, meaningful, and equitable progress, and there has never been more drive to overcome these lead service line removal challenges than now. The scale of the work ahead requires strong coordination at the Federal, state, and local levels, as demonstrated here today. Field hearings like this help drive innovation in legislation and I am extremely appreciative of our ability to testify today. Thank you, and I look forward to answering your questions.