



CITY OF CHICAGO

Lead Service Line Replacement Plan



LSLR Program Update

September 09, 2020

**Confidential/Pre-Decisional –
Not for Public Dissemination**

Summary

- To prepare Chicago for pending regulations and maintain its leadership in the water industry, we must
 - Develop a plan for replacing the City's ~400,000 lead service lines
 - Explore grants to fund the program and reduce the financial burden on City residents

Phase I: (Low cost & high impact)

- Equity LSLR – Funded by CDBG grants/Unique to City
- Homeowner-Initiated LSLR
- Pilot LSLR alongside water main replacement – Funded with IEPA SRF Loan with Principal Forgiveness

Phase II: (Proactively integrates future regulations into existing practices)

- LSLR alongside water and sewer main replacements
- LSLR for public side water service line breaks
- Public LSLR when notified of private side replacement



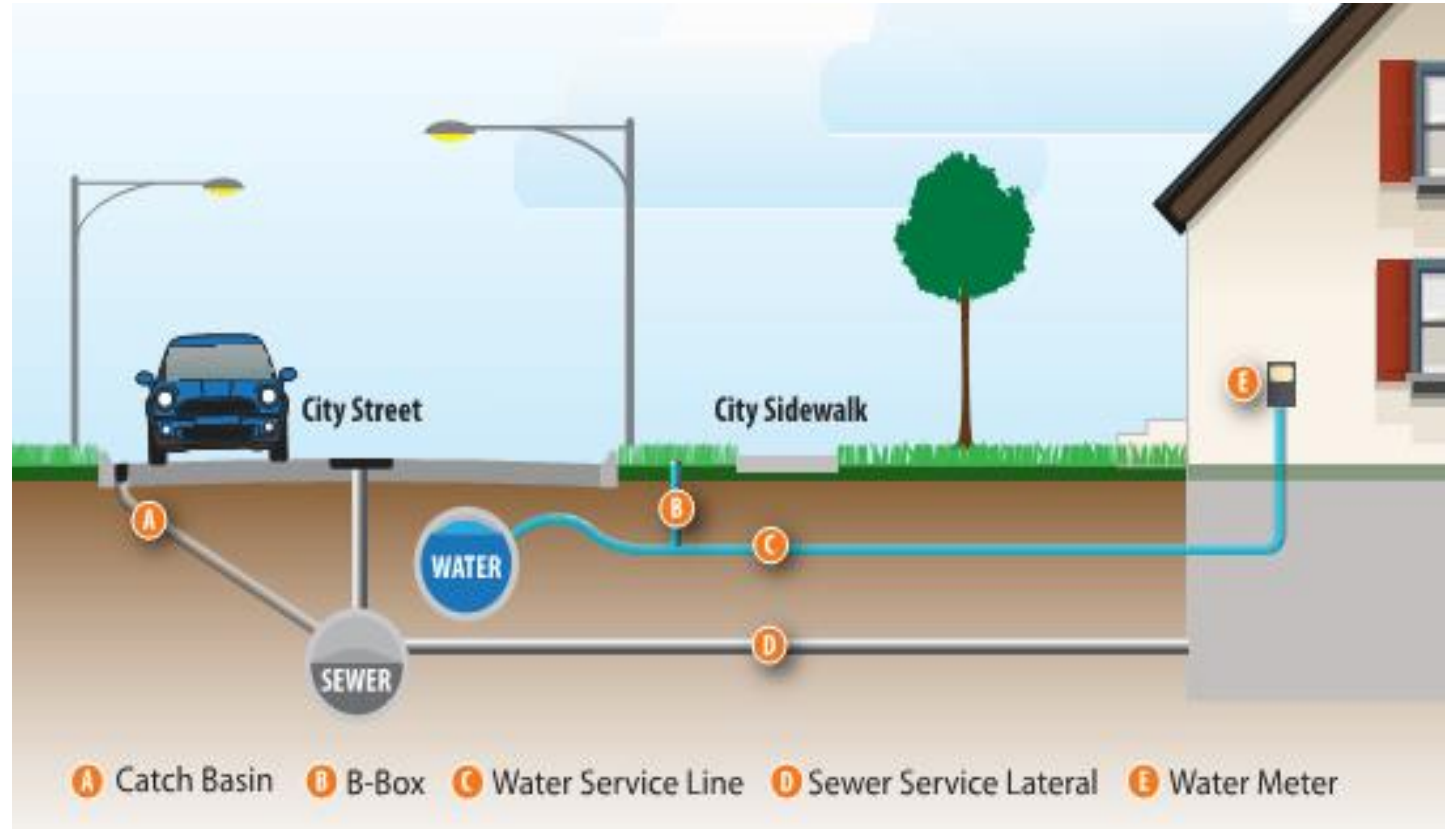
Lead Service Line Replacement Plan Goals

- Comply with regulatory requirements
- Be proactive and maintain Chicago's position as a leader in the industry
- Provide financial and logistical support to disadvantaged, low-income neighborhoods
- Minimize financial impact to City residents
 - Programs are voluntary
 - Seek Federal and State funding
 - Spread LSL replacements out over multiple decades

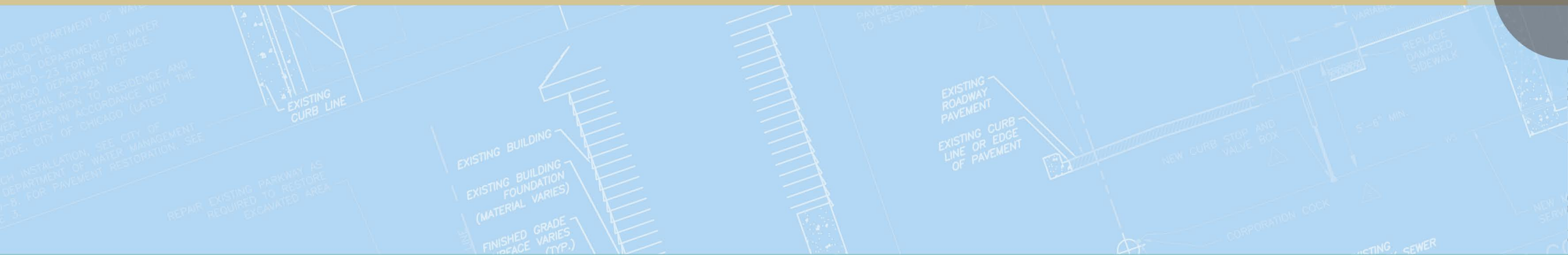


Background

- City has approximately 400,000 lead service lines
 - Public Side: City Responsibility (Water Main to B-Box)
 - Private Side: Homeowner Responsibility (B-Box to House)
- City water currently below EPA lead action limit
 - 90% of samples must be below 15 ppb; Chicago 90th-percentile is 9.1 ppb
- A full replacement costs approximately \$15,000-\$26,000 per LSL

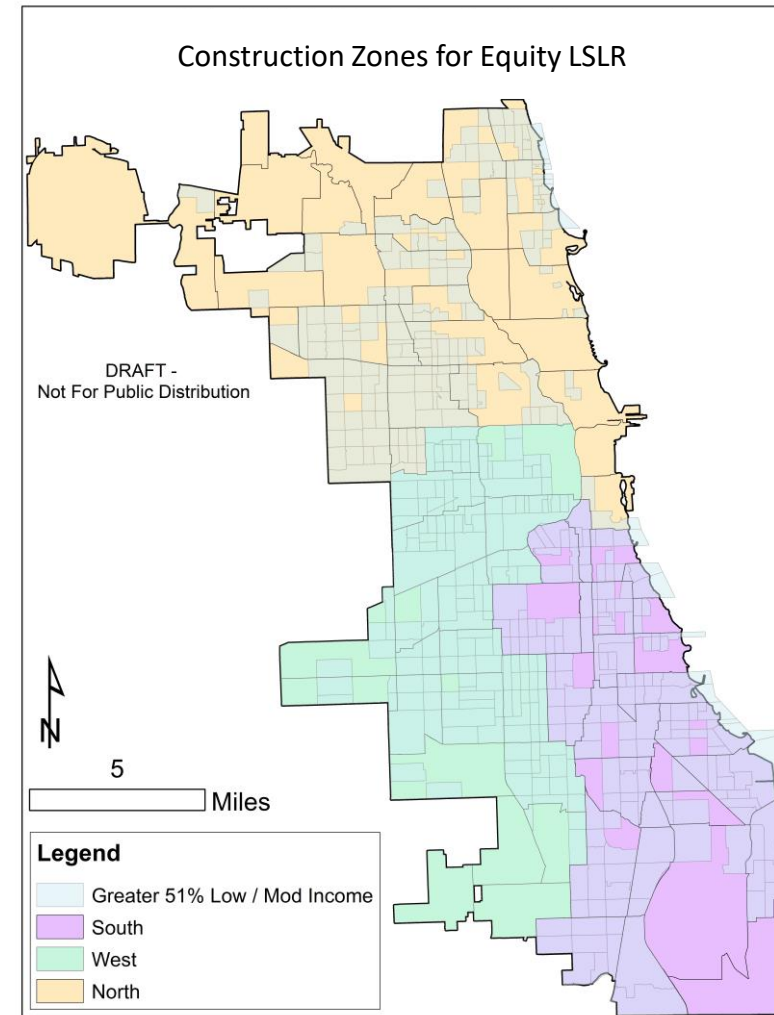


Phase I Lead Service Line Replacement (Equity, Homeowner-Initiated, and Pilot)



Phase I – Equity LSLR (unique to Chicago)

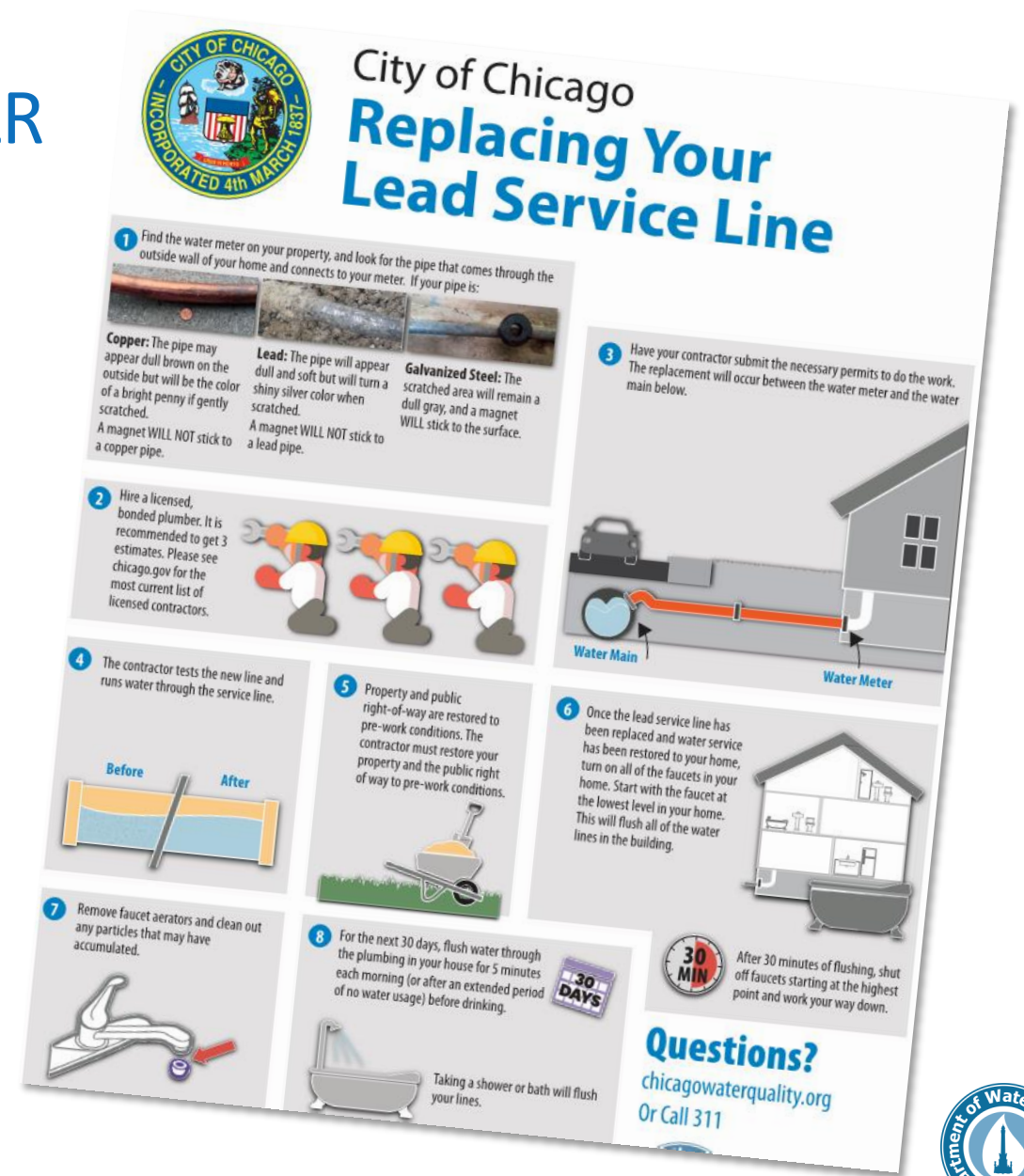
- Summary: Free full LSLR for low-income homeowners with tested lead >15 ppb
 - Focused on low-income neighborhoods
- City Cost: \$20,000-\$26,000 per full LSLR
- Funding: Grants (CDBG, SRF, WIIN)
 - \$10M-\$20M CDBG planned for 2021
- Estimated Annual Replacements: 400-800
- Timeline:
 - Late 2020: Bid contract, pass ordinance and begin accepting applications
 - 2021: Begin construction; continually review applications and apply for grants



Replacements capped by region and prioritized by neighborhood income

Phase I – Homeowner-Initiated LSLR

- Summary: Homeowners replacing their full LSL receive:
 - Streamlined permitting process
 - Subsidized permit fees
 - Suggestions on contractor selection
- City Cost: \$400 in material costs (~\$3,100 in foregone fees) per full LSLR
- Funding: Operating budget
- Estimated Annual Replacements: < 100 (40 in 2019)
- Timeline:
 - Late 2020: Passage of fee waiver ordinance
 - January 2021: Fee-waiver applications open for submission



City will eventually be required to pay for public side under proposed LCR revisions

Phase I – LSLR alongside Water Main Replacement (Block-Level)

- Summary: Replace water main and associated full LSL along one block in low/moderate income area
 - Review construction techniques / coordination
 - Gauge public participation
 - Update cost estimates and identify efficiencies
- City Cost: \$15,000-\$25,000 per full LSLR
 - Water main costs additional
- Funding: Up to \$4M SRF principal forgiveness (application submitted to IEPA and pending review)
- Estimated Replacements: 50
- Timeline: 2020/ 2021: Bid Contract, public outreach, and project construction (pending IEPA approval)



Phase I Summary of Costs

Program	Target Number of Annual LSLR	Who Pays for Service Line	Cost to the City per LSL ⁽²⁾	Subsidies by City	Total Approximate Cost
Equity LSLR	600	City	\$25,000 (Limited Restoration)	Public and Private Side	\$15 M for 2020 (Funded by CDBG)
Homeowner-Initiated LSLR	<100	Homeowner (Until Regulations Change)	\$400 ⁽¹⁾	\$3,100 ⁽¹⁾	\$40,000 Annual (Funded by City)
LSLR Alongside Water Main Replacements	50	City	\$25,000 (Limited Restoration)	Public and Private Side	\$4 M available (Funded by IEPA SRF Principal Forgiveness)

(1) \$3,100 is approximate permit fees subsidized by City (CDOT and CDWM fees). Cost of \$400 includes materials for new meter and B-box; City labor and equipment costs not included.

(2) Engineering, construction management and program management costs not included.

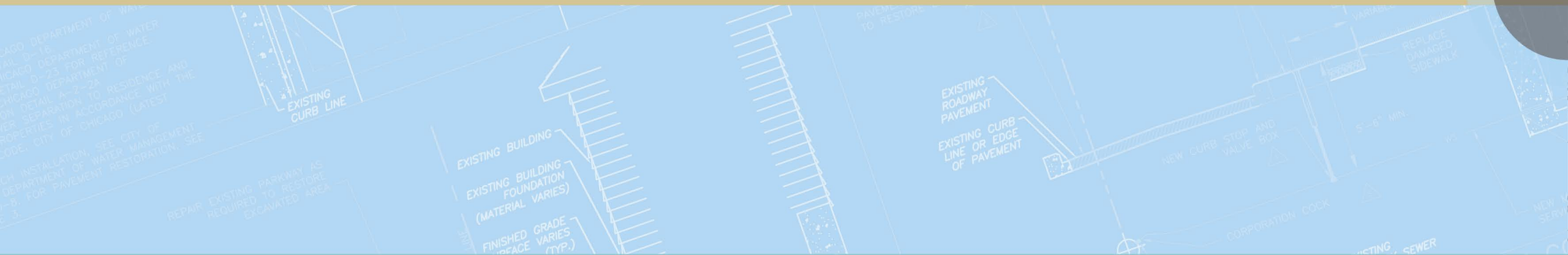


Overall LSLR Program Timeline

Fall 2020	Announce Equity LSLR and Homeowner-Initiated LSLR Programs
Fall 2020	Form Work Group for LSLR stakeholder & community feedback options developed by the City to inform program design & promote participation.
Winter 2020	Bid contracts for Equity LSLR Program and Water Main LSLR (Based on IEPA SRF Loan Program)
Winter 2020 (LCR Revisions*)	Develop new water and sewer main replacement CIP and develop approach for LSLR for water service breaks (based on revised LCR)
Winter 2020	Passage of ordinances for Homeowner-Initiated and Equity LSLR Programs and Applications open for Equity LSLR Program
Spring 2021	Begin construction for Equity LSLR Program
Summer 2021	Water Main LSLR alongside Water Main Replacement



Phase II Lead Service Line Replacement (Water/Sewer Main CIP and Service Line Breaks)



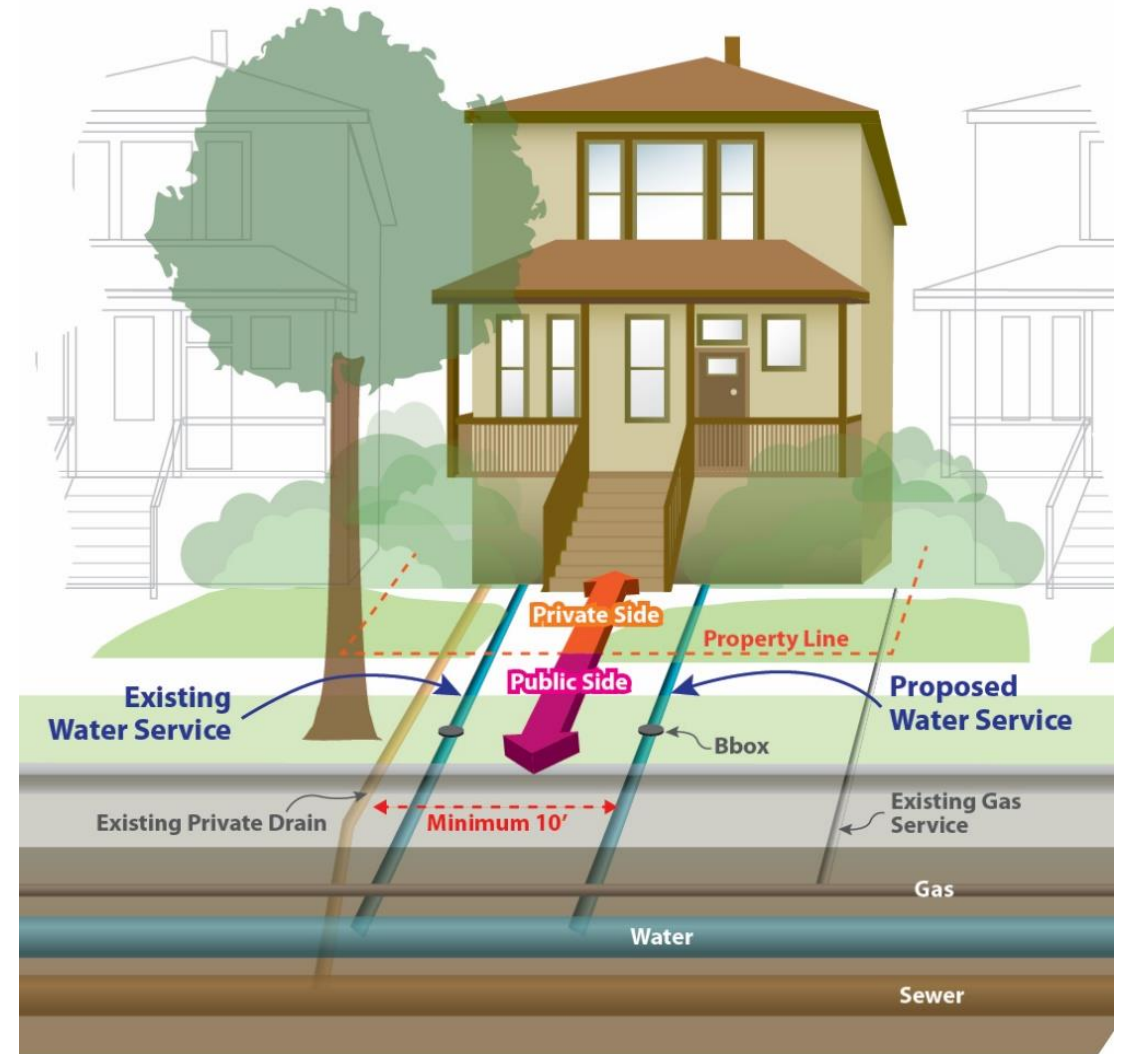
Phase II - LSLR Alongside Water or Sewer Main Replacements

- Summary: City replaces public side of lead service line and encourages homeowner to replace private side during water main and sewer main projects
- City Cost: \$10,000-\$18,000 per public-side LSLR
 - Possible additional cost to City if it elects to subsidize private side
- Funding: Grants & Loans
- Estimated Annual Replacements: 160/mile of water main (average); if replace 15 miles/year, replace 2,400 LSL/year if homeowners participate
- Timeline: Upon Approval of LSLR Plan
- At 15 miles/year, City cost for public side LSLR is \$45 MM/year (not including cost of water main replacement)



Phase II – LSLR for Water Service Line Breaks

- Summary: Replace the LSL for:
 - Public side leak/break - by City
 - Private side leak - by homeowner (full LSLR should be encouraged by City)
- City Cost: \$12,000-\$20,000 per public-side LSLR
 - Current cost for a repair \$4,000-\$7,000
 - Additional cost to City if choose to subsidize private side
- Funding:
 - Currently, repairs are paid for by Operating Budget
- Estimated Annual Replacements: 4,000-5,000
- Timeline: After passage of revised Lead and Copper Rule
- Estimated annual cost of \$67.5 MM for public side LSLR

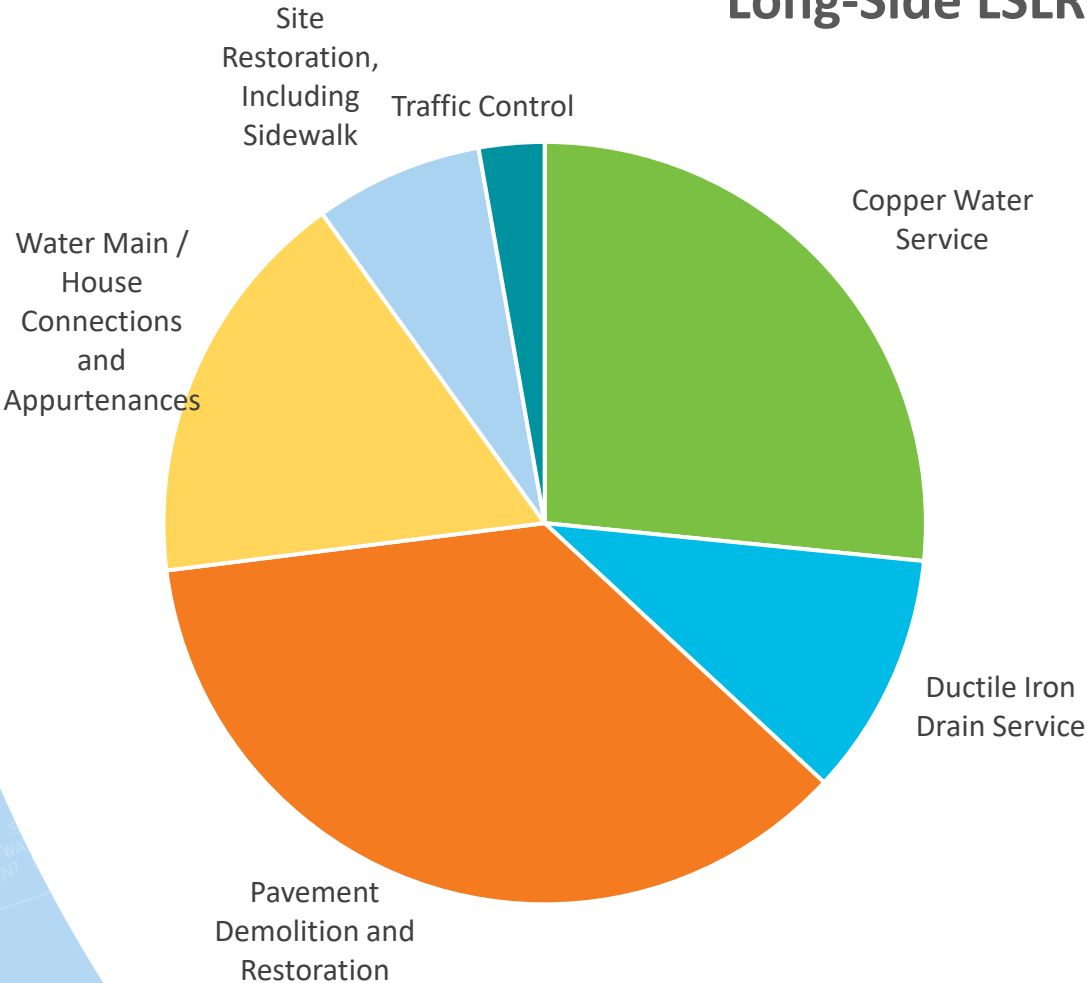


Random number and geographic distribution of replacements.

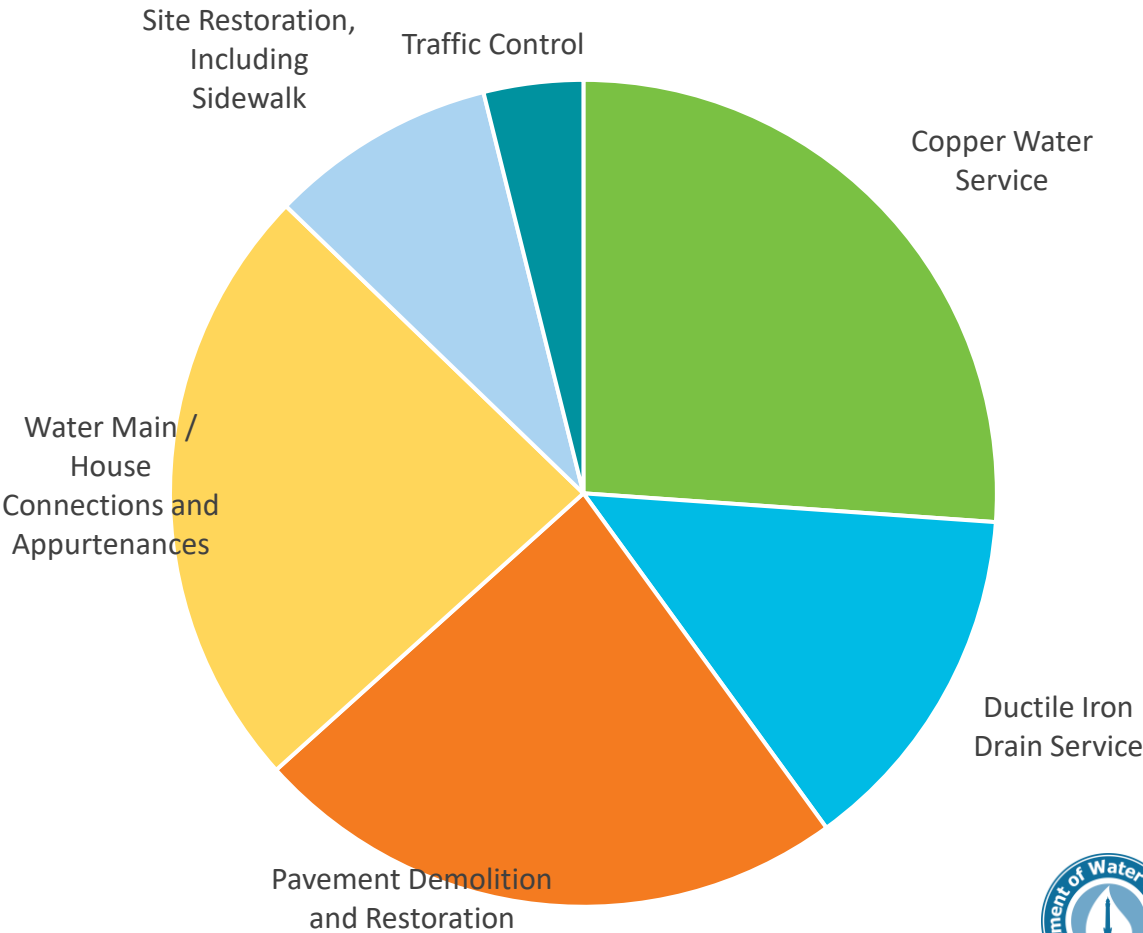


LSLR Cost Estimate Breakdown

Long-Side LSLR



Short-Side LSLR



Funding Opportunities

Phase I – Early-Out

Funding Agency	Program	Timeframe
CDBG Grant	Equity LSLR	2021 (\$10 to \$20M)
EPA WIIN Grant	Equity LSLR	2020 and 2021 (\$7M) Application in Review by EPA
IEPA SRF Principal Forgiveness	LSLR Alongside Water Main Replacement	2021 (\$4M of Principal Forgiveness) Application/Project Plan Submitted

Phase II – Water/Sewer Main CIP and Breaks*

Funding Agency	Program	Timeframe
IEPA SRF Loan	LSLR Alongside Water and Sewer Main Replacements	2021 and Beyond
WIFIA Loan	LSLR Alongside Water and Sewer Main Replacements	2022 and Beyond

IML is proposing to include a state-imposed fee on all water users*



Thank you!

