

Lead Service Line Program Semi-Annual Update

Public Works Committee

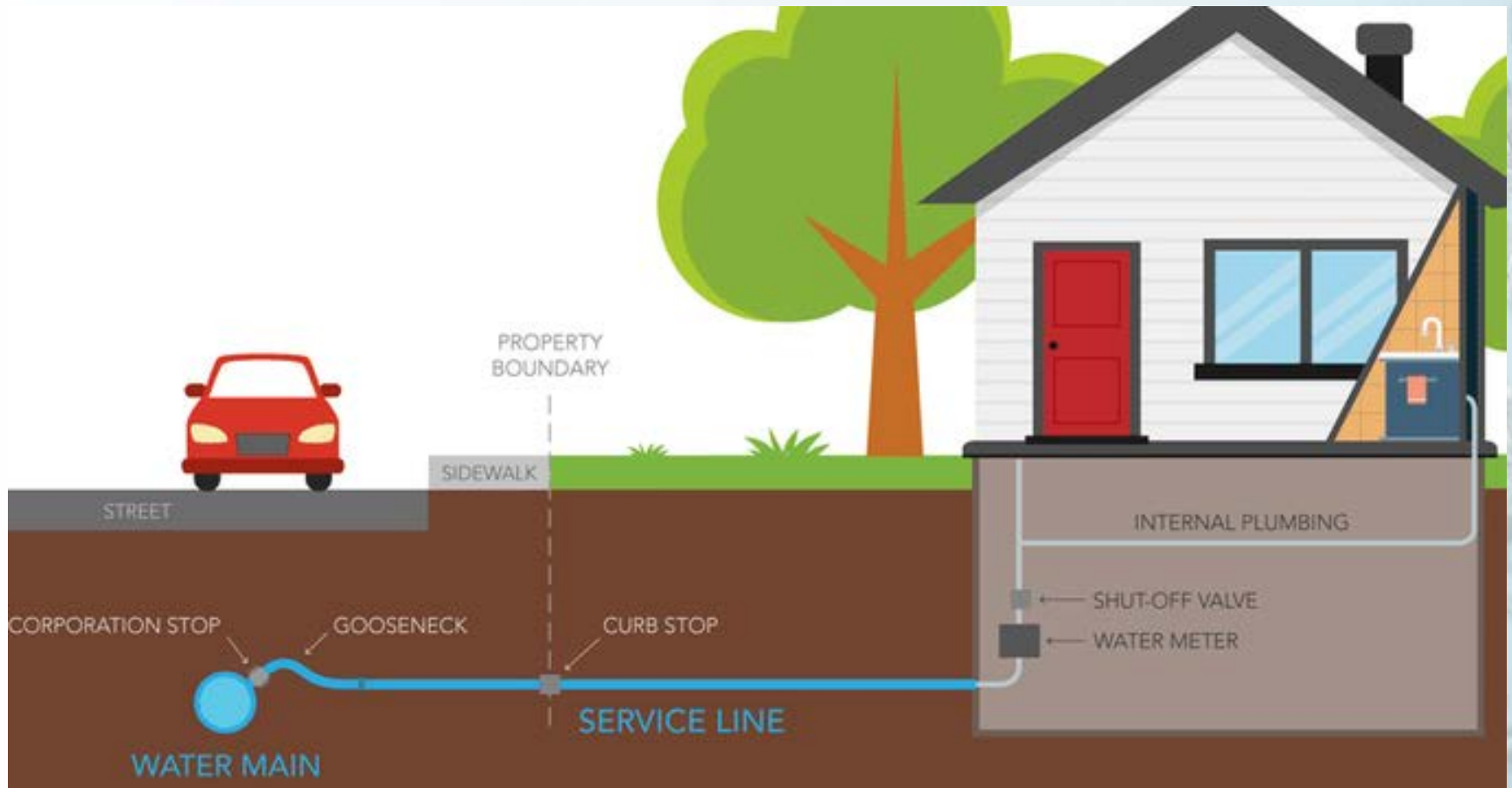
January 24, 2018

Jennifer Gonda, Superintendent

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What is a Service Line?



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Recap: Lead Service Lines

- The water service line is co-owned by the utility and the property owner
- Milwaukee Water Works (MWW) started phasing out the use of lead for the public side of water service lines in 1947
- City enacted an ordinance in 1962 requiring copper service line installation on the private side
- MWW has used orthophosphate for corrosion control since 1996
- MWW is compliant with the Lead and Copper Rule, and is on a reduced monitoring status because our corrosion control is considered to be optimized

Recap:

Lead Service Lines 2015-2016

- MWW performed PILOT study in 2015
- Placed moratorium on water main projects connected to lead service lines starting in 2016
- Began to replace rather than repair – conducted partial replacements for leaks and breaks only (approx. 330)
 - Filters were provided
 - Lead informational materials were provided
 - Owners were encouraged to replace their side (14 did)
- Worked to set up a legal and financial framework for full replacement mandate

Lead Service Lines: Full Replacement Mandate

As of January 1, 2017, MWW is replacing lead service lines with copper when:

- A lead service line is found to be leaking or disturbed
- A lead service line is disturbed during planned water main construction
- A lead service line serves water to a licensed child care facility or a private school
- An owner calls to initiate a replacement (no subsidy)

Replacing both the public and private side is mandatory by ordinance; no partial replacements or repairs.

Lead Service Line Inventory

- Number of active lead services in system:
 - 74,125 currently active and turned on
 - 3,460 currently active, but turned off at the curb stop
 - 46% of the 169,816 water services
 - 93% serve residential properties
- The last lead service line installed on the public side was in 1951, but approximately 2,000 properties were built later and connected to them

Lead Service Line Inventory

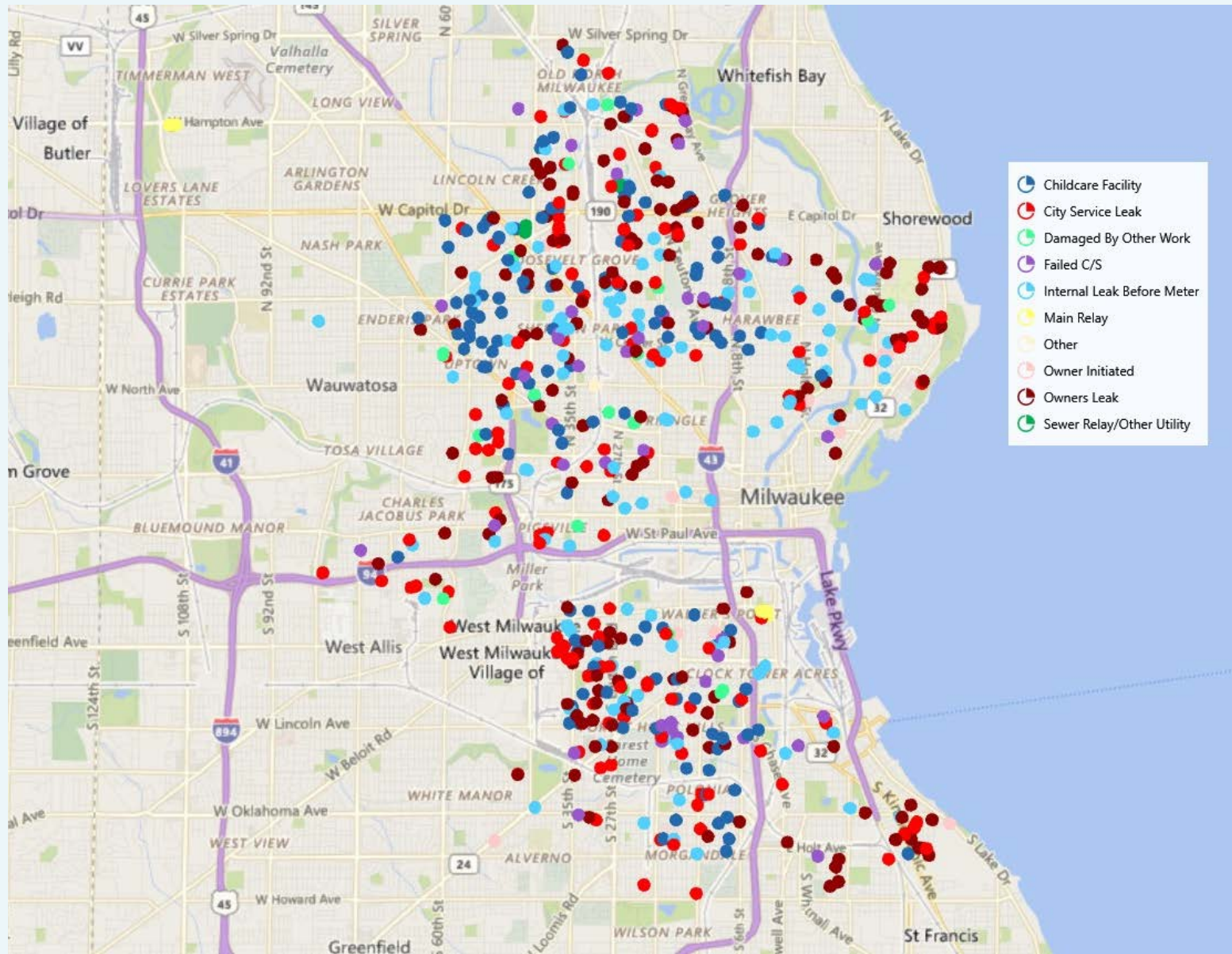
1,321 of properties built between 1952 and 1962 have been visually inspected.

- Of the 1,228 that have copper on the public side:
 - 1,192 (97.1%) have copper on the private side
 - 29 (2.4%) have lead on the private side
- Of the 84 that have lead on the public side:
 - 72 (85.7%) have copper on the private side
 - 12 (14.3%) have lead on the private side
- Of the 9 that have cast iron on the public side:
 - 1 (11.1%) has lead on the private side

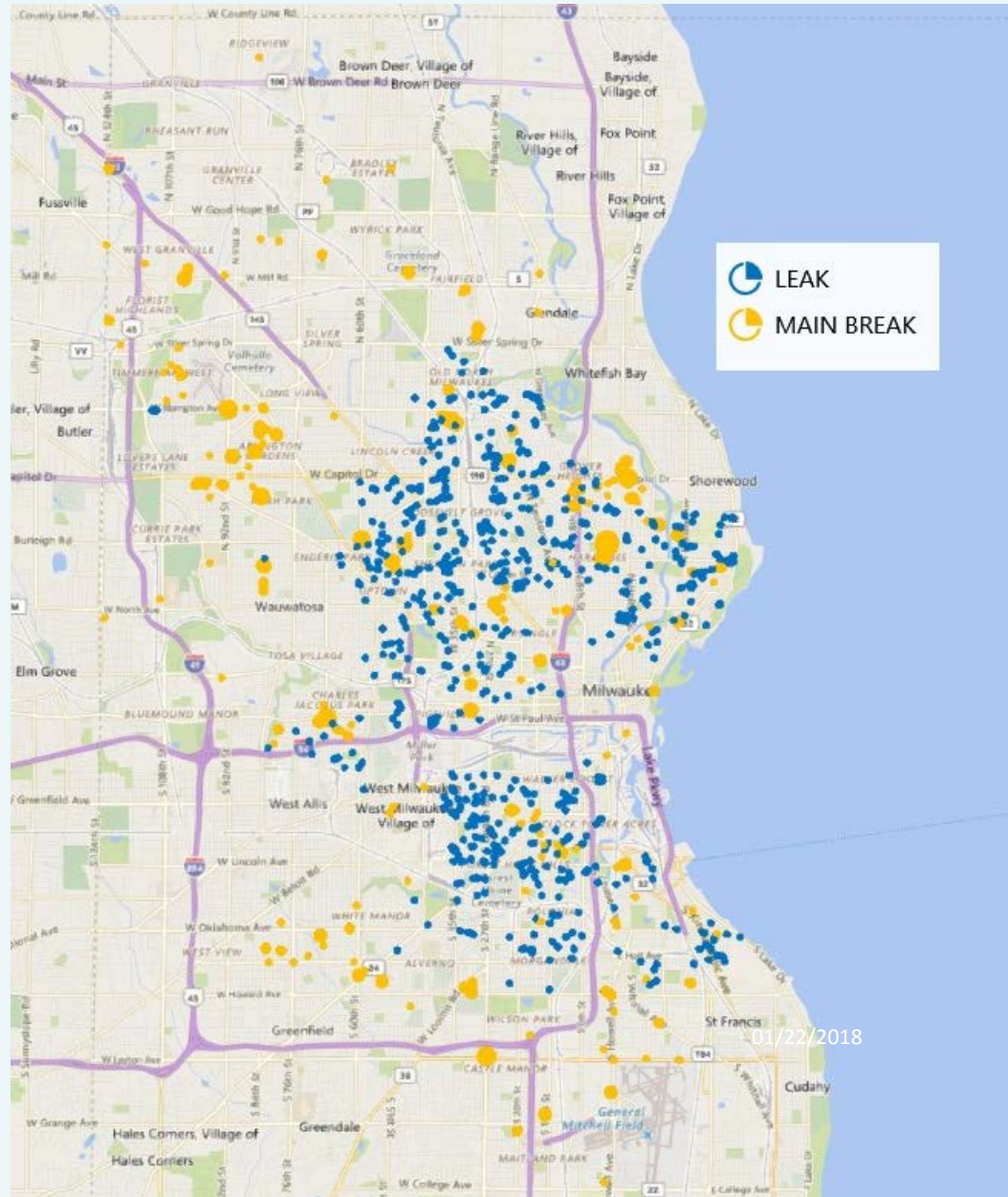
LSL Replacements in 2017-2018

- In 2017, 610 replacement projects were completed
 - 432 were leaks or disruptions
 - 144 were child cares
 - 10 were owner initiated
 - 18 related to water main relays
 - 6 related to other utility work
- In 2018, 27 replacement projects have been completed
 - All are leaks or disruptions
 - Child care/water main replacements will resume in March
- In 2018, 800 replacements have been funded
 - 240 child cares (approximately 100 have already signed the consent)
 - 110 related to water mains
 - 450 leaks or disruptions

Lead Service Lines Replaced To-Date



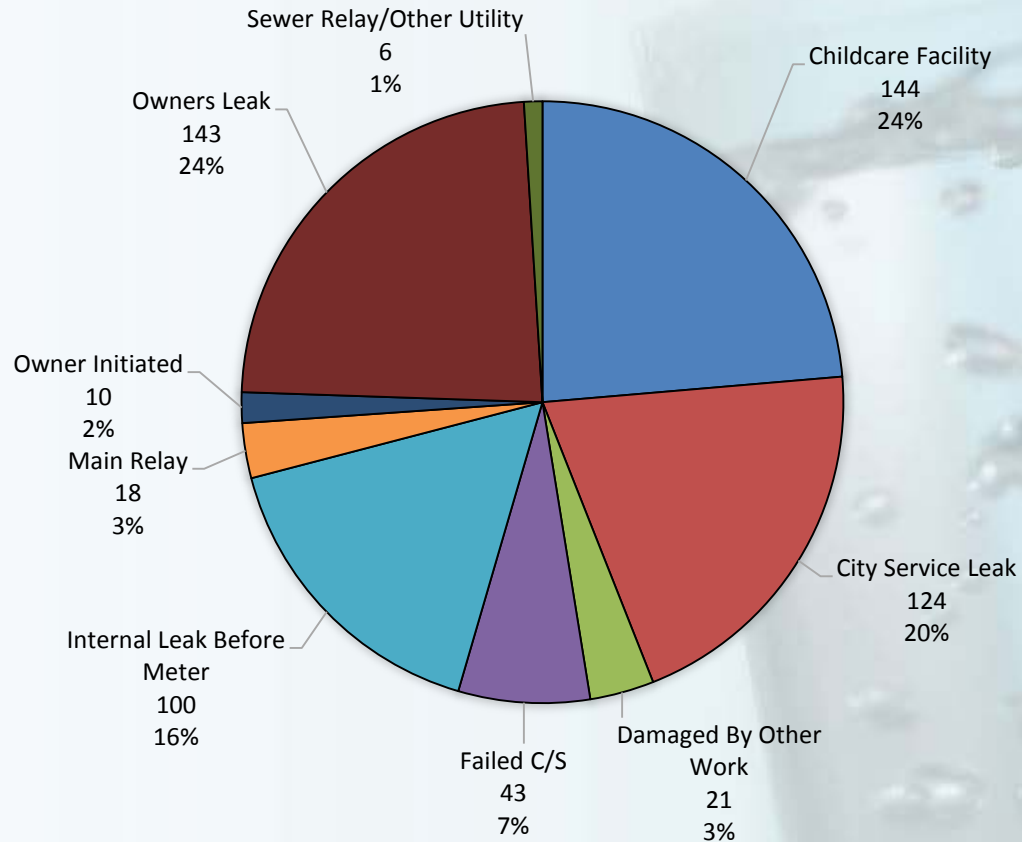
2017 Main Breaks vs. LSL Breaks



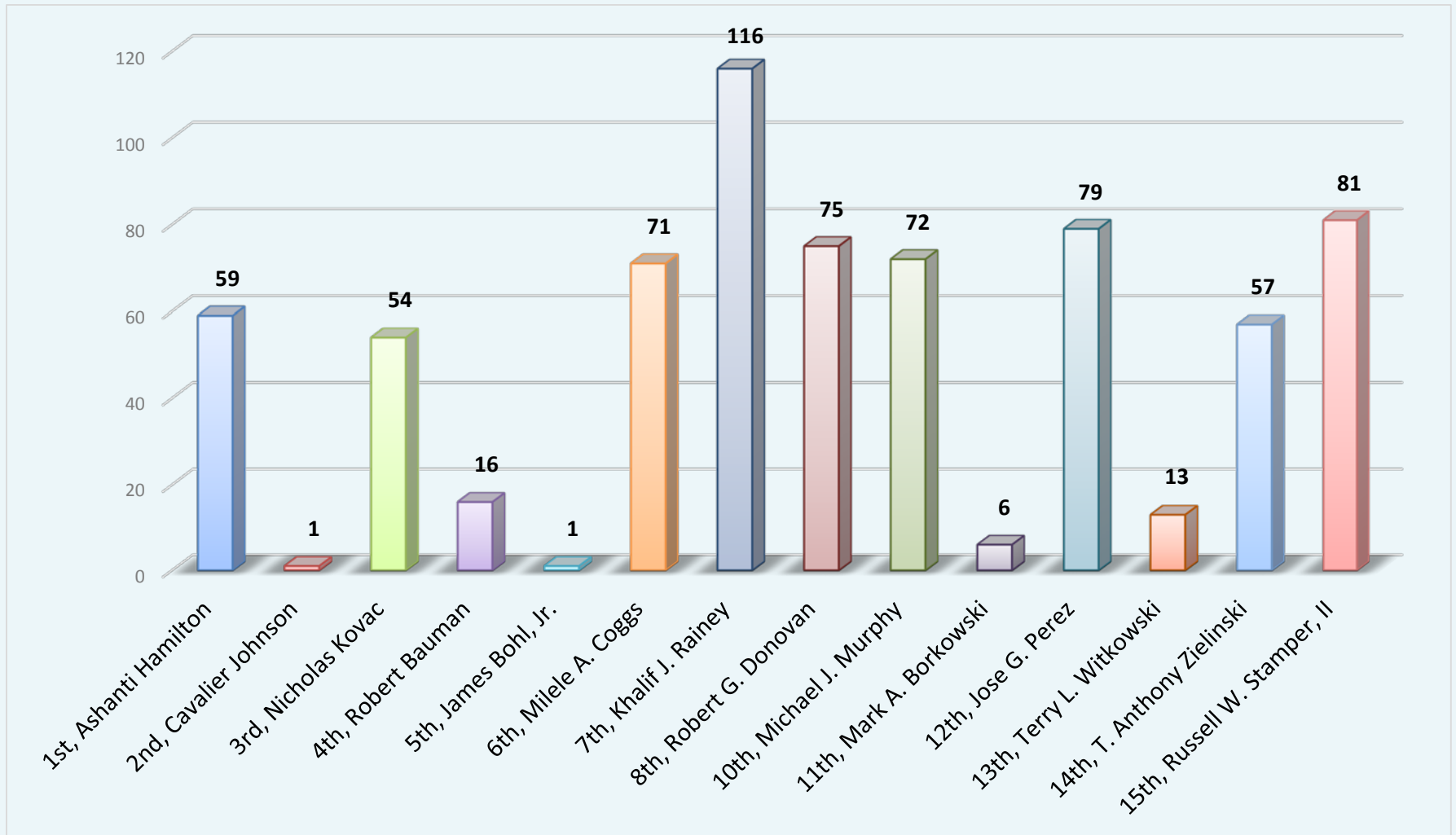
\$6.6 million Investment in 2017

\$8.8 million Planned for 2018

- Risk-Based
- Vulnerable Populations Prioritized
- Coordinated with Planned Investments



LSL Replacements To-Date by Aldermanic District



Approximate 2017-2019 Funding Plan 2,450 LSL Replacements

- 600 in 2017...800 in 2018...1,000 in 2019
- \$13.2 million projected cost of public side funded by MWW through water rate revenue
- \$13.2 million projected cost of private side funded by:
 - \$1.6 million of DNR/EPA funding for child cares
 - \$4.8 million of DNR/EPA funding for other private property; **recently notified of \$2.8 million increase***
 - \$3.3 million in property owner contributions
 - \$1.4 million in 2018 capital budget
 - \$2.1 million in 2019 capital budget (or other sources*)

***Note: Additional DNR/EPA funding may become available that will increase this amount.**

Building LSL Program Capacity

- Recommend adding financial assistance for:
 - Completing the private side where a partial was previously conducted
 - Instances where both elevated blood lead levels and elevated water lead levels are documented in a household
- Add program capacity for:
 - More water main related projects
 - Planned replacements related to other street or utility work

2020 and Beyond

- Minimum of 1,200 replacements annually
- Cost of public side funded by MWW through water rate revenue – rate increases will be required
- Cost of private side funded by combination of:
 - Property owner contributions
 - City capital budget
 - \$2.5 million IGA payment from Waukesha
 - Other possibilities:
 - Additional IGA payments from new wholesale customers
 - Growth in MWW PILOT payment
 - Water rate revenue may cover 50% as a result of SB 48 (policy changes apply)
 - TID Amendments

LSL Crews



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Lead Service Line Cost Update

- Average Lead Service Line Replacement Cost in 2017 YTD: \$13,100
 - Private Side: \$7,100
 - Public Side: \$6,000
- Budget estimate was \$11,000
 - \$5,000 Private/\$6,000 Public
- Using private contractors in a low bid contracting process

Analysis based on 226 invoices paid out of anticipated 600+ in 2017

Lead Service Line Cost Update

- More leaks than anticipated; fewer child cares responded
- Private side replacement costs significantly higher than estimated
- Contractor bids for LSL replacement place large share of cost on length of service line
- Length of private side of service line from curb stop to meter longer than anticipated - driving up cost
- Property owner share capped at \$1,600
- City responsible for any excess private side replacement cost not covered by DNR grant
 - Current estimate: \$1.4 million

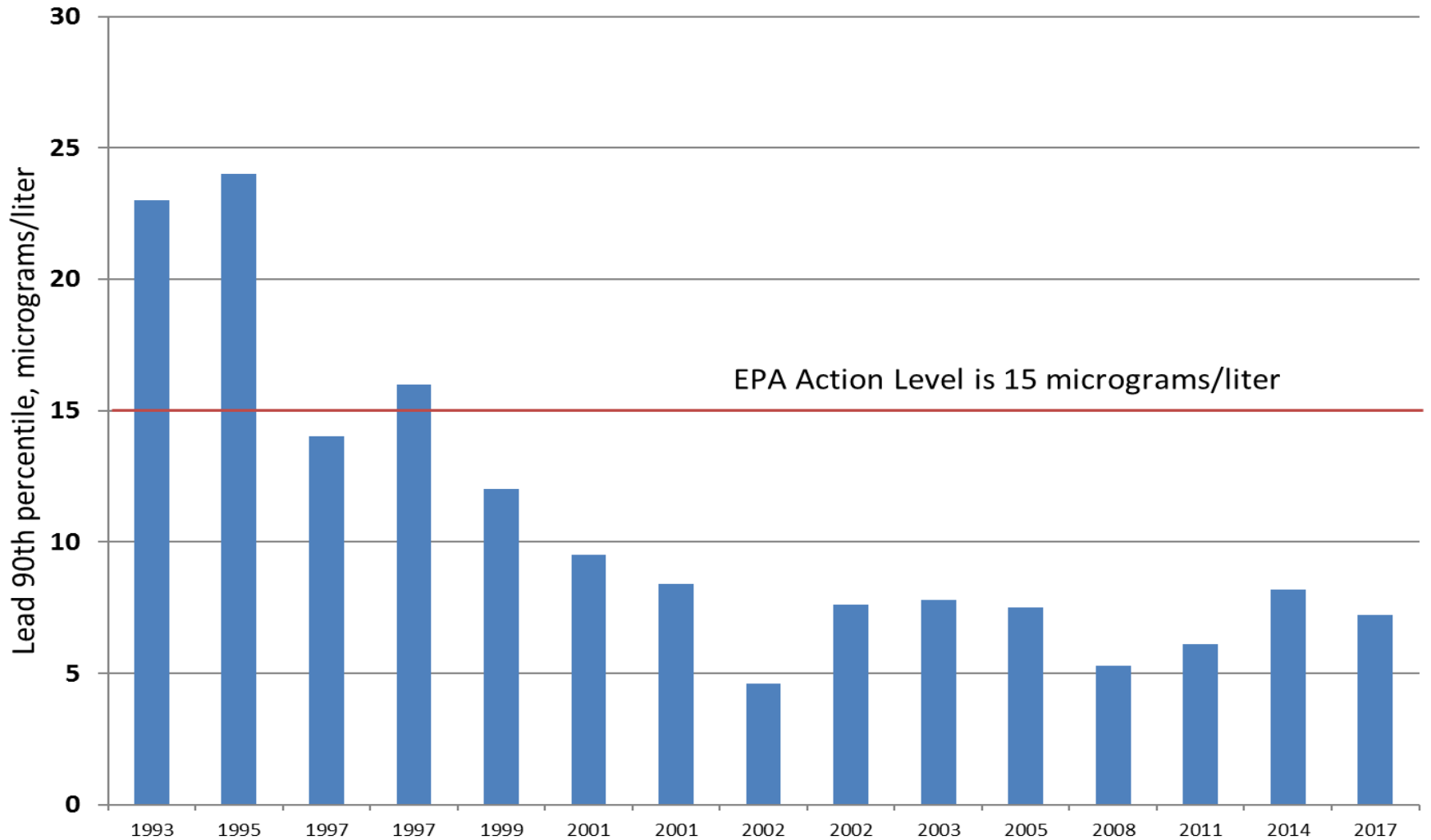
Long Setback Example



2017 MWW Lead Testing

- Lead and Copper Rule compliance testing
 - Required by the DNR/EPA every three years
 - Included funding for annual testing in 2018 budget
- Charter Schools – 28 of 425 outlets exceeded action level
- Sewer/Road project testing
 - No significant increase found
- Lead service line replacement-related testing
 - 113 agreed to participate
- All parties have been notified of their results
- Samples are currently sent to a private lab, but our DNR lab certification is underway to bring it in house

Results of Milwaukee Water Works Samples Collected in Compliance with EPA Lead and Copper Rule



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MWW Filter Distribution

- 1,435 filters distributed since January 2016
- Filters are now provided when:
 - An LSL replacement is planned
 - A property with a LSL is directly affected by a water main break
 - A sewer or road project is proximate to a property with a LSL (by request)
 - A planned or emergency water shut-off affects a property with a LSL (by request)
 - A frozen service has to be thawed



Outreach in 2017

- Provided lead-safe water information to customers at utility and DPW activities affecting lead service lines
- Provided information at Customer Service Center (visible to 28,000 in-person visits, 506 lead related calls)
- Presentations by MWW/MHD team at 49 community meetings, health fairs and expos
- Lead-Safe Milwaukee insert in Municipal Service Bills (170,000 mailed March-June)



Outreach in 2017

- Multimedia 11-month campaign to promote prevention of childhood lead exposure in paint and water
 - Bus ads/shelters, website, online ads, over 6m views
- Data search at milwaukee.gov/water to check if a property has City-owned side of lead service line
- City Channel 25 PSA and video about lead service lines
- Operating Budget of \$55,000 plus 1 FTE of staff time (Plus Lead-Safe Milwaukee campaign of \$50,000)

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SAFE PAINT SAFE WATER SAFE KIDS

2018 Outreach Plan

- Letter/magnet to 33,000 properties built from 1952 to 1962
- Lead-Safe Milwaukee brochure in 2nd and 4th quarter bills
- Rotating monthly informational meetings to be held at neighborhood libraries
- Specialized outreach meetings for water main projects including lead service line work
- Curriculum being developed to share with schools including a video and lesson plan
- Continued presence by request at community meetings and events
- Lead-Safe Milwaukee “water wagon” being designed for presence at outdoor events and festivals
- Operating Budget of \$100,000 plus 1 FTE of staff time

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Other Matters

- Lead and Copper Rule revisions
- Linings and coatings
- Corrosion control studies



Questions?

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