

**The Process As outlined in the EPA Service Line Inventory Template will be followed.**

**The Detailed Inventory Tab Information on the EPA Spreadsheet will be organized utilizing a custom data base.**

**Evaluate Available Records to determine date of construction, including:**

- 1 Construction Records/As-Build Plans (Digitize all existing paper plans)
- 2 Subdivision Plats and historic Aerial photos (when did the structure first appear on mapping)
- 3 PVA Records of sales
- 4 Real Estate Sales (examine to see if house is included in the appraisal)
- 5 Building Codes (are there codes that will impact material installation)
- 6 Water System Records including tap and break reports as well as past sampling reports
- 7 Area Development District Records for project funding records
- 8 Building Inspection Records
- 9 Audits, which can detail the start of a bond issue that indicated when a project was completed.
- 10 KY Division of Water records

**Review records gathered, digitize any paper records. Rank into levels of validity.**

**Organise into a service line inventory database that reflects the records outlined above including (at a minimum)**

- 1 Type of Building
- 2 Location Information (address, GPS location, and sampling point number)
- 3 Material used in every service line broken into:
  - a Utility Owned Line
  - b Privately owned line
- 4 Date of Construction
- 5 Methods utilized to verify material

**Evaluation of data needing further verification**

**Develop Verification Plan**

**Verify actual service line material**

## Cost Estimates - Service Line Inventory

**Table 3-9 Cost Ranges and Averages for Service Line Material Verification Methods**

Identification Method	Cost Range (\$/SL Material Evaluated)	Average Cost (\$/SL Material Evaluated)	Identification Method Used For (Utility-Side, Customer-Side or Both)
Historical Records (New Program)	\$0.10-\$57.71	\$14.13	Utility-Side (and sometimes Customer-Side)
Water Quality - Sequential Sampling	\$290-\$1,140	\$715	Both
Water Quality - Flushed/Targeted Service Line Sampling	\$110-\$240	\$175	Both
Inspections with Past & Current Projects	\$21.78-\$35.28	\$28.53	Both
Customer-Provided Data	\$8.44-\$11.12	\$9.85	Customer-Side
Door-to-Door Inspections	\$50.00-\$103.79	\$69.23	Customer-Side
Mechanical Excavation	\$500-\$2,500	\$1,120	Both
Vacuum Excavation	\$80-\$450	\$320	Both (double cost)
CCTV/Camera – External	\$286	\$286	Both
CCTV/Camera – Internal	\$81	\$81	Both
Electro-scan Interior Probe (1,000 inspections)	\$168.20	\$168.20	Both
Predictive Modeling (after initial ~20% physical confirmation)	\$0.20-\$5.00	\$1.30	Both

From: [AWWA] American Water Works Association (November, 2022) Considerations when Costing Lead Service Line Identification and Replacement. Prepared by CDM Smith.

**Note:** These are national figures; local data and costs may vary and water systems should consult local resources for the most accurate information.