BlueConduit

Lead Service Line Predictions & No Lead Validation

Manage unknowns for your Service Line Inventory and replacement planning using locally-tailored, AI-driven predictive modeling.

BlueConduit's LSL Predictions delivers the most precise, transparent, and user-friendly lead and GRR likelihood predictions for every service line segment. Our solution minimizes the complexity of handling regulatory demands and relationships, making lead service line (LSL) inventory and replacement management remarkably simple and efficient.

LSL Predictions delivers:

Best, most accurate predictions

For early customers who've done the work to inventory and replace lead service lines (LSL), lead service lines were predicted correctly with >90% success.

Tailored, local models based on unique community analysis

Our Data Science team and technology looks at all available data, sometimes hundreds of factors, assessing thousands of models to identify the best-fit model for your community.

Efficient service line material classification

Customers routinely spend 90-95% less on service line material identification and reduce the estimated completion date from 3-10+ years to only 2-3 months for physical verification.

Simple, clear written reports

BlueConduit's solution generates simple, easy to understand reports at every step of the process, supporting full transparency, understanding, and ease of communication and compliance for water systems.

No Lead Validation made easy

As part of BlueConduit's LSL Predictions, the No Lead Validation solution uses locally tailored, rigorous statistical methods and reporting to help water systems statistically show the absence of lead in their systems.

No Lead Validation allows utilities to:

- **Simply understand and comply with state guidance** BlueConduit's policy team engages with your state regulators to understand the nuances of the state guidance for Inventories and predictive modeling. Our solution then delivers a fully compliant inventory, alongside supporting documentation for your state primacy agency.

- **Classify all unknowns as "Non Lead," based on limited physical verification** Our statistical method approach enables water systems to classify all remaining unknowns as "Non Lead" based on representative physical verifications and rigorous analysis.

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www.blueconduit.com

FAQs

Do you help me build my Service Line Inventory? _____ Yes, as needed. We can help you standardize and transform your data into a compliant Inventory for your regulator. For all customers, we also do data reviews for compliance and help you utilize predictions to classify service line materials in your Inventory.

Is the predictive model accurate? _____ We consider multiple measures of accuracy including recall, precision, confidence intervals, and ground truth hit rates, among other model performance metrics. For early customers who've already started replacements, lead was correctly predicted with a >90% ground truth hit rate.

How many field verifications will I need to do? _____ It depends on your existing dataset and your state's guidance. Our models can often generate high confidence predictions with as few as 100-150 representative field verifications.

How does it work?

STEP 1
Data review

BlueConduit conducts a comprehensive review of your existing service line inventory data.

STEP 2
Representative field investigations

The Data Science team + tech recommends a phased list of representative field inspections.

STEP 3
Lead Service Line Predictions or a No Lead Validation report

Based on the representative sample combined with existing data, LSL Predictions, supported by expert Data Scientists, makes likelihood of lead predictions for every service line segment of unknown material. For water systems with no known or inspected lead, a No Lead Validation report can be generated to statistically validate the low likelihood of lead across the full water system.

STEP 4
Automated state template customization

Our technology, enabled by decisions made during compliance reviews, transforms your data into a state-compliant Service Line Inventory format.

STEP 5
Replacement planning

Guided by our lead service line predictions, operations to dig and replace pipes can begin. As work is carried out, the predictive model applies newly discovered information to improve its predictions going forward.

Ready to get started?

Contact Us