

## FROM UNKNOWN TO KNOWN

# The Path from Prediction to Classification

Predictive modeling is the quickest and most efficient way to classify large numbers of service lines of unknown materials for LCRI compliance. We outline below just how this process works:

## 01 QUANTIFY YOUR UNKNOWNNS.

This step should have already been started with the initial inventory submission in October 2024, but as new information, including material, install date, pipe diameter, and build year becomes available, you may find the exact number of unknowns has changed. BlueConduit can help you parse and supplement this information where needed.



## 02 COLLECT A REPRESENTATIVE, RANDOMIZED SAMPLE FOR FIELD VERIFICATION

Verifying a small number of unknown lines will give our model valuable information to generate its predictions. BlueConduit typically provides an inspection list for maximum efficiency.



## 04 SET THRESHOLDS FOR CLASSIFYING PREDICTIONS AS LEAD/GRR, UNKNOWN OR NON-LEAD

Thresholds can be set by state guidance, metrics of model performance, and the water system's risk tolerance level. BlueConduit's expert data scientists recommend the best classification thresholds for your system & needs.

## 03 GENERATE PREDICTIONS

Based on your above verifications, the BlueConduit model will generate predictions on the likelihood of lead segment-by-segment, or provide predictions that validate the absence of lead in your system. Based on the model's performance, regulatory requirements and your own goals, step 2 may need to be repeated.

## 05 UPDATE YOUR NEWLY CLASSIFIED LINES INTO YOUR STATE TEMPLATE

BlueConduit can help you upload your revised inventory in a state-compliant format and submit it to your agency.



## 06 SUBMIT YOUR POST-PROJECT REPORT

with methodology details and other state requirements, as appropriate per state guidelines.

