



# Lead Service Line Inventory Project

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# Agenda

<b>1. Lead and Copper Replacement Rule</b>	Introduction to the LCRR
<b>2. AU water GIS</b>	GIS footprint level of completion
<b>3. ESRI Lead Water Service Solution</b>	Load process and available products
<b>4. Data Sources</b>	Data collection for solution process
<b>5. Project Process</b>	Data prep and loading procedures
<b>6. Project Status</b>	Where we stand
<b>7. Questions</b>	

# Lead and Copper Replacement Rule LCRR – Title 40-section 141.84

- On August 4, 2022, the Environmental Protection Agency (EPA) released updated guidelines to the Lead and Copper Rule Improvements (LCRI), issued in January of 2021, an update from the original 1991 publication of the Lead and Copper Rule (LCR).
- Revisions to the Safe Drinking Water Act Lead and Copper Rule (LCRR) require utilities to provide a publicly accessible inventory of lead water services by October 16<sup>th</sup>, 2024. For systems that provide over 50,000 services, this data must be accessible on the company website for public viewing.
- Austin Utilities (AU) provides water services to approximately 25,000 residents of the City of Austin, MN and must be fully compliant by October 2024.

# AU Water GIS

## GIS Migration

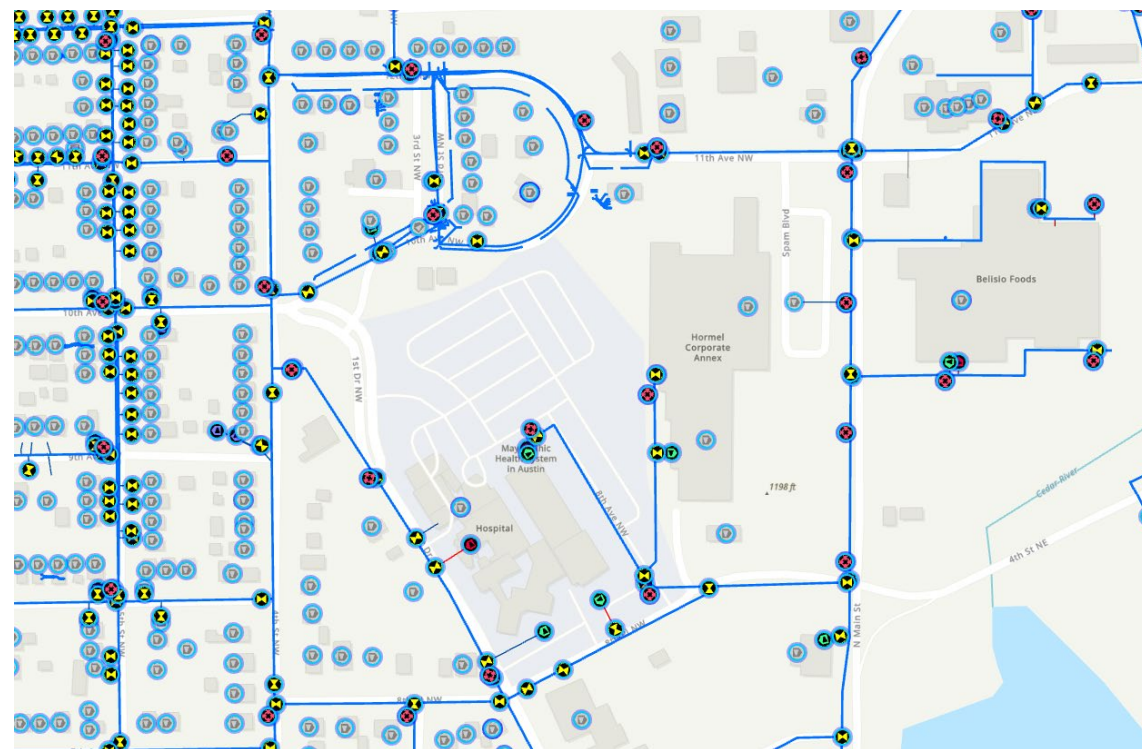
- 2018 migration to UN
- Lack of updates – vacancy
- Multiple Services

## Lack of Services

- 1,448 / 9,290 Active – 15%
- Many only to curb stop

## Heavy Cleanup

- Service extensions
- Service changes
- One per parcel



# ESRI Lead Service Line Inventory Solution

## Enterprise Portal -

- <https://gis.austinutilities.com/portal>
- Deploy Solution

## Solution Requirements

### Using the Lead Service Line Replacement Solution

1. Service Connection
  1. Address
2. Service Line
  1. Material Type
  2. Diameter
  3. Service Location
3. Parcel
  1. Build Year (Pre 1986)



ArcGIS Solutions

The largest collection of geospatial solutions



# Data Source



## Services

- CAD/GPS
- Created

## AMI Meter Installs

- 2022, 2023, 2024 csv
- material, diameter, service location

## Parcels

## Build dates

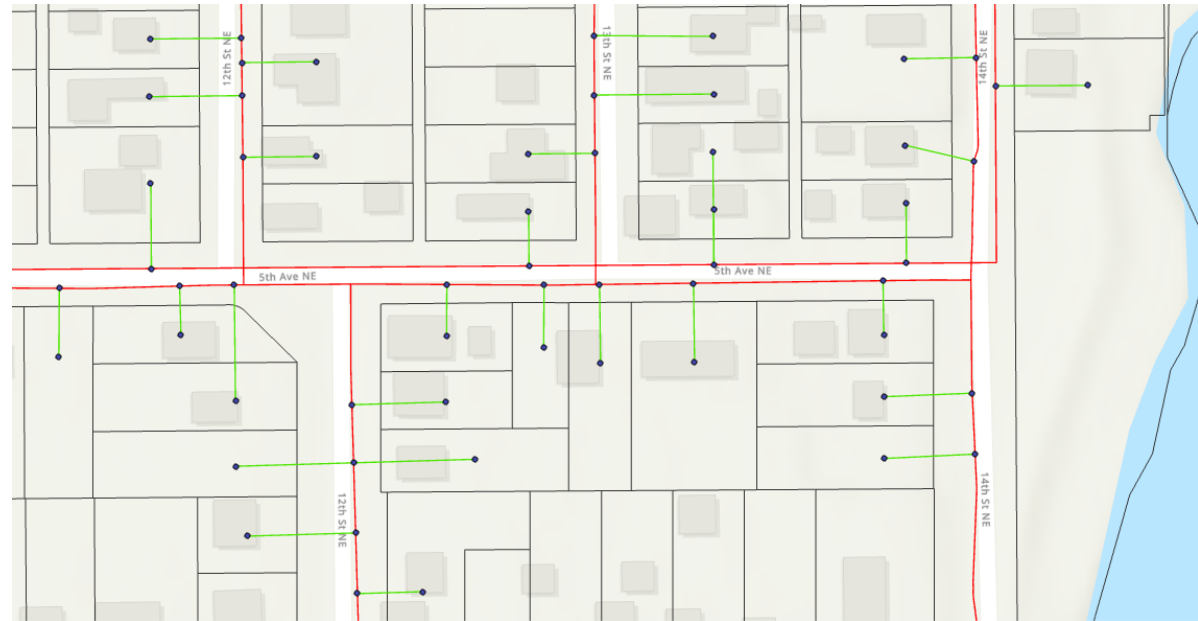
- PIN

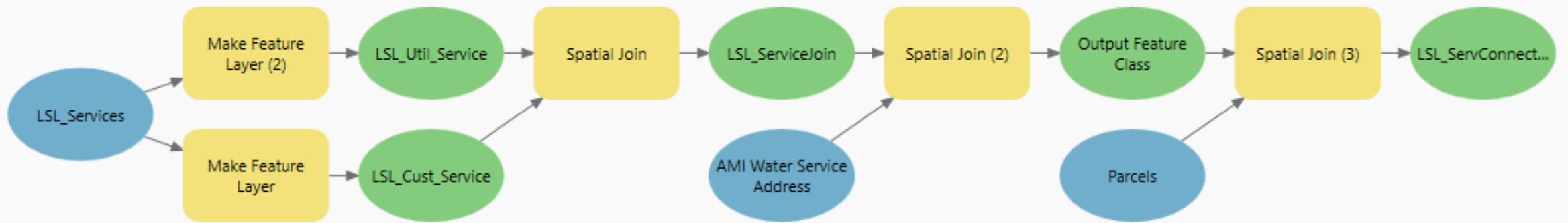
## CIS System – Service Connection

- Geolocate Address points
  - Service location – 90%

# Data Process

- Missing Services
  - Create “unknown” service
    - Near GP Tool
      - Service connections, water main
      - Only active parcels
      - Within 500 feet
    - Copy points to GDB
    - Near tool w/location
      - Exports Near XY – Event Layer
      - Export Feature – Append Copy
    - Points to line
- Data Migration
  - Service connect/Service line
    - Service Location #
    - Material type, diameter, asset ID





# Data Process

- LSL Point Model
  - Splits Service
  - Spatial Joins
  - All data in one point



# Project Status

- Data Loading Tools
  - Enterprise 11.2
    - No longer add-on
  - Lack of instruction
    - Scripts – Calc Utility Status
    - Domain lookup sheet
  - Create manual lookup
  - Create manual script
- Current ESRI case



# Next Steps



## Internal Field Maps

Internal Testing  
Field Training



## Dashboard



## Public facing map

Disclaimers  
Informational Lead Service page  
Customer Submittal Survey



## Bowling Green LSL map

Clear symbology  
Not too busy  
Address search



## Update process

# Questions?



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