Survey123 – Water Service Verification

Ryan Elvrum
GIS Analyst
Moorhead Public Service

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What is ArcGIS Survey123?

- Survey123 is a form-centric data collection tool
- Web and mobile friendly
- ArcGIS Online or ArcGIS Enterprise

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Getting Started

- Requires ArcGIS Organization in either ArcGIS Online or ArcGIS Enterprise
- Survey123 Web Designer (“Drag-and-drop”)
- Survey123 Connect (XLSForm spreadsheet)

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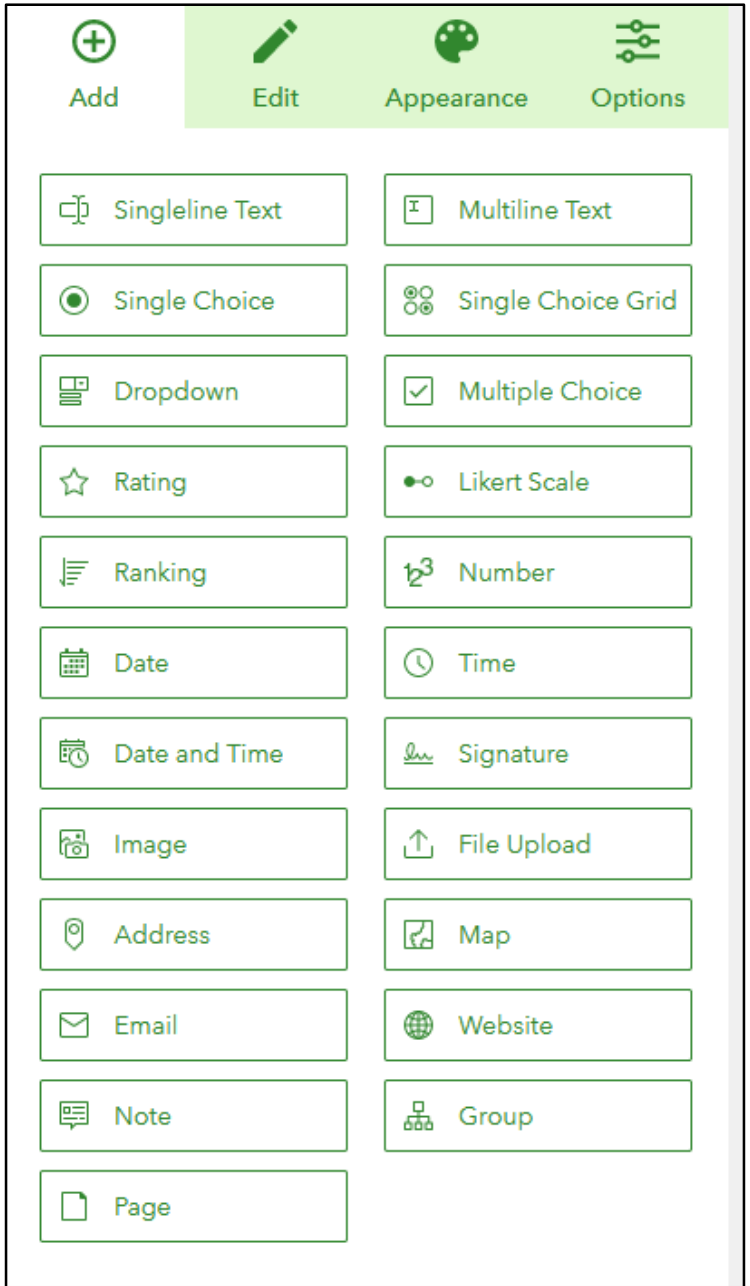
Survey123 – Web Designer



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How We Are Using Survey123

- Survey created through Survey123 Web Designer
- Shared publicly (BEWARE!)
- Door-hanger information left at homes with link to survey if unable to enter.

What We Are Doing

- Lead Service Line Inventory (LSLI)
- Informing our customers about the LSLI and lead in drinking water
- Asking customers to submit a survey that identifies service line material
- Reviewing submissions and updating records

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Results (so far)

- Participation – *Could be better*
  - 21% MPS on-site verified
  - 18% Survey verified (1 unapproved submission)
  - 61% Not entry/No response
- Good quality survey submissions
- Easy to manage data

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Reviewing Survey Results

Water Service Material Survey - Customer Submissions

Table Filters unReviewed | Approved | Follow-up | Denied | Copper | Lead | Unable to Determine | Needs GIS Update

Water Service Material Survey Submissions

Search

MPS Internal Submi...	Service Line Material	First Name	Date Submitted	EditDate	Updated in GIS
Denied	Copper	Seth		1/3/2022, 8:47 AM	
Approved	Copper	Amanda	12/14/2021, 12:00 PM	12/14/2021, 3:34 PM	Yes
Approved	Copper	Samuel	12/15/2021, 12:00 PM	12/16/2021, 11:28 AM	Yes
Approved	Copper	Jessica	12/18/2021, 12:00 PM	12/20/2021, 9:23 AM	Yes
Approved	Copper	Elissa	12/19/2021, 12:00 PM	12/20/2021, 9:20 AM	Yes
Approved	Copper	Spencer	12/30/2021, 12:00 PM	1/3/2022, 8:35 AM	Yes
Approved	Copper	David	1/16/2022, 12:00 PM	2/18/2022, 1:00 PM	Yes
Approved	Copper	David	1/16/2022, 12:00 PM	2/18/2022, 1:00 PM	Yes
Approved	Unable to Determine	Heath	1/23/2022, 12:00 PM	2/22/2022, 2:53 PM	No
Approved	Copper	paul	3/9/2022, 12:00 PM	3/14/2022, 11:09 AM	Yes
Approved	Copper	Tina	3/10/2022, 12:00 PM	3/14/2022, 11:07 AM	Yes
Approved	Copper	Brent	3/13/2022, 12:00 PM	3/14/2022, 4:16 PM	Yes
Approved	Copper	Erin	3/13/2022, 12:00 PM	3/14/2022, 4:17 PM	Yes

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David [redacted]0, USA |

First Name	David
Last Name	[redacted]
Address	[redacted]IN, 56560,
Unit # or Apt. #	
Service Line Material	Copper
Date Submitted	1/16/2022, 12:00 PM
MPS Internal Submission Review	Approved
Updated in GIS	Yes

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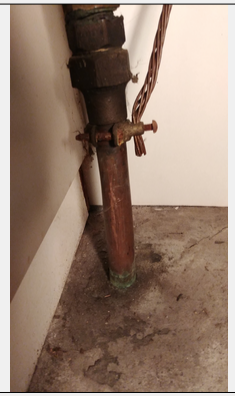
0116221342.jpg



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Lead Service Line Inventory

- Historical documents
- Data clean-up and standardization
- Internal field data collection – ESRI Field Maps
- Build public awareness

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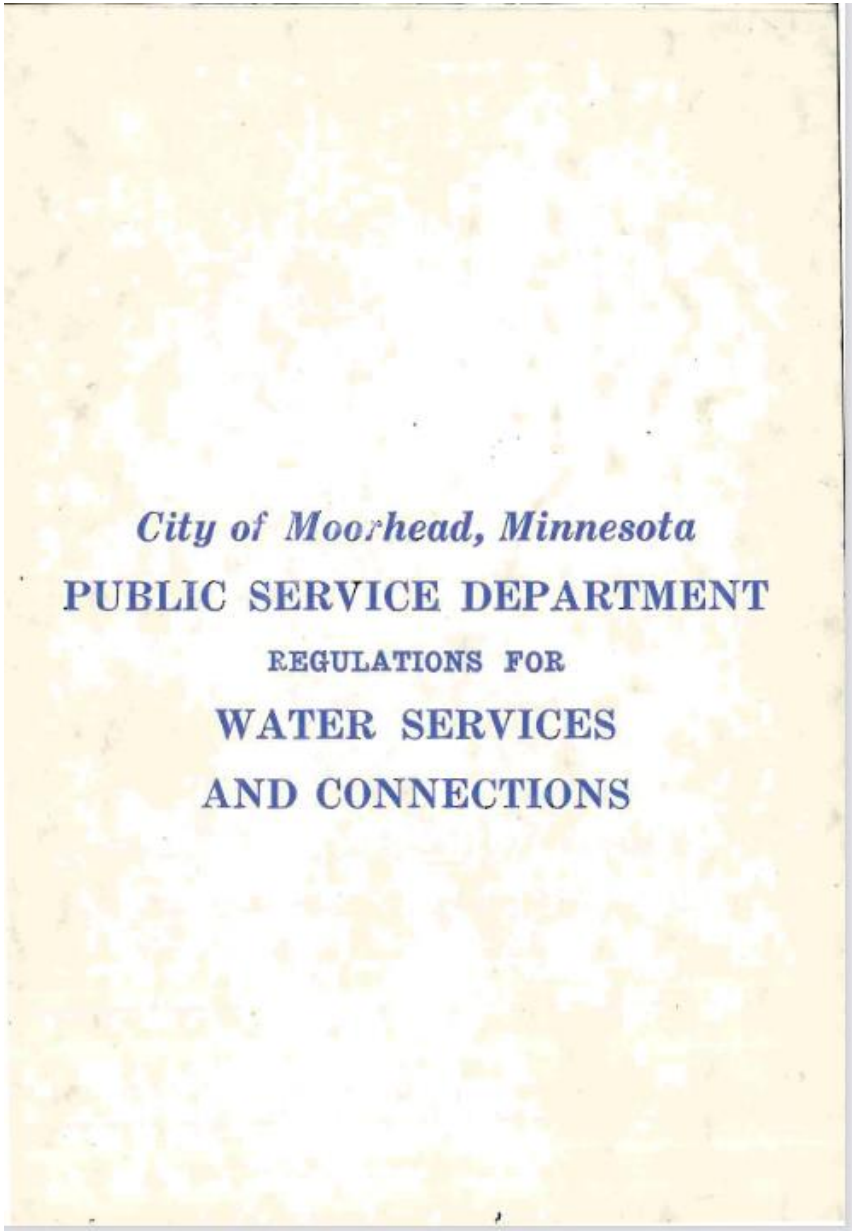
MPS Water Regulations - 1954



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MPS Regulations – Service Requirements

Paragraph 6
SERVICES: RESTRICTIONS ON LAYING OF PIPES

No consumer shall be permitted to conduct water pipes across lots or buildings to adjoining premises; but all service pipe shall be laid on streets, alleys, or public ground to the premises to be served and enter at the front or rear of the building nearest the main.

Paragraph 7
SERVICE REQUIREMENTS OF PIPES

Every service pipe must have a standard, Minneapolis pattern, compression stop and waste placed adjacent to and on street side of meter, and be kept in working order all times so that the water may be shut off by the occupant of the premises. There shall also be a gate valve placed on the outlet side of any water meter larger than five eighths (5/8) inches and not more than three (3) feet from the meter, so that the meter can be taken out or replaced without draining the pipe system in the building.

Paragraph 8
SERVICES: OTHER REGULATIONS

(1) Services shall be constructed either of standard Commercial copper pipe or standard cast iron pipe.

(2) No services shall be constructed from a main for any purpose having a greater capacity than fifty per cent (50%) of the main, and in no case shall a service be larger than six (6) inches in diameter.

(3) Services one and one-half (1½) inches in diameter or less shall be of standard copper pipe. Taps on water mains may be made up to one (1) inch in diameter except on mains of six (6) inches diameter or less where taps larger than three-quarter (3/4 inch will not be permitted.

(4) Services over one and one-half (1½) inches in diameter shall be of standard cast iron pipe connected to the main by a "Smith Sleeve and Valve" or tee. Any cast iron service less than four (4) inches in size shall have a four (4) inch gate valve with proper reducers.

(5) No new service shall be constructed and no existing service shall be changed in such manner that more than one building shall be on same service.

(6) Lead of copper services shall have at least two (2) feet of extra lenth between the main and the curb cock.

Paragraph 9
SERVICES: STOP COCKS ON

All stop cocks on the line of service must have round ways of the same diameter as the pipe with which they are placed and of a make and pattern approved by the Public Service Department.

Paragraph 10
SERVICES: DEPTH OF: COCK REQUIRED

All services shall have a minimum depth of seven (7) feet below finished grade; and each service shall have a stop or curb cock fitted with a box set at standard location, six (6) inches outside of, and at the same grade as, the sidewalk.

Paragraph 11
SEPARATE CURB STOP COCKS REQUIRED FOR EACH BUILDING

Owners of premises having water services which do not have separate curb stop cocks and boxes for each building or which otherwise do not conform to the requirements in this chapter at the time of its passage shall be required to put in such curb stop cock or make such other changes as are necessary to conform to these requirements, when so instructed by the Public Service Department.

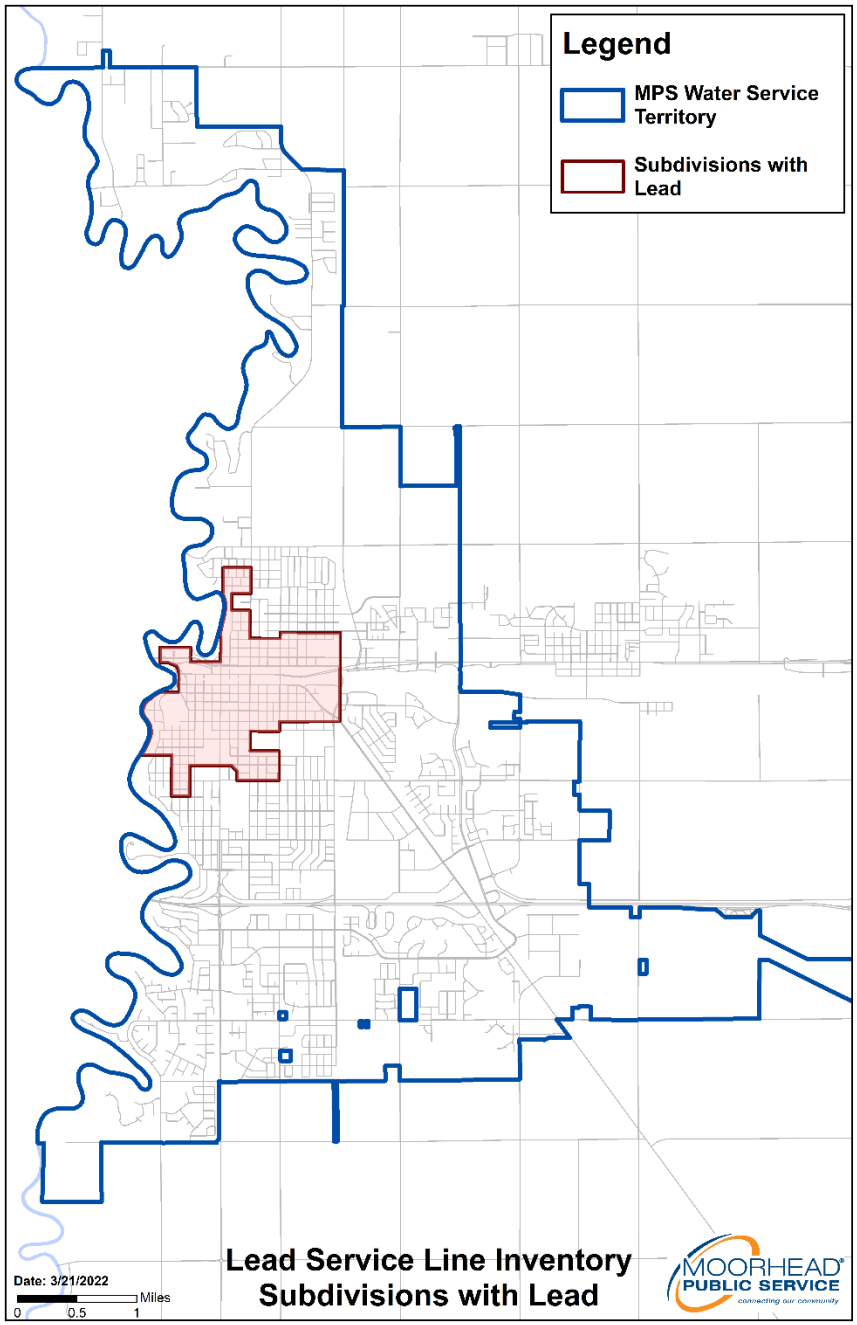
Paragraph 12
STOP BOXES: DESIGN, CONTROL OF, PLUMBER'S USE OF

The stop box used shall be of a design approved by the Public Service Department and must have an unobstructed opening at least one and one-half (1½) inches in diameter and fitted with a substantial cover. The outside shut off and stop box shall be under the sole control of the Public Service Department; and on one, except an employee or persons especially authorized by the Public Service Department, shall open the cover of such box or turn water on or off, provided, however, that licensed plumbers may turn water on or off for testing plumbing or making repairs, but whenever so used the shut off must be left closed if found closed, and open if found open, by the plumber who uses it.

Paragraph 13
STOP BOXES: MAINTENANCE OF; CITY MAY CLEAN, REPAIR, WHEN

The Stop box on every service must be kept flush with the surrounding ground or sidewalk surface, and must be visible from the sidewalk; and must be kept in good condition and ready for use at all times by the owner. Should the owner ne-

Subdivisions – Lead Services



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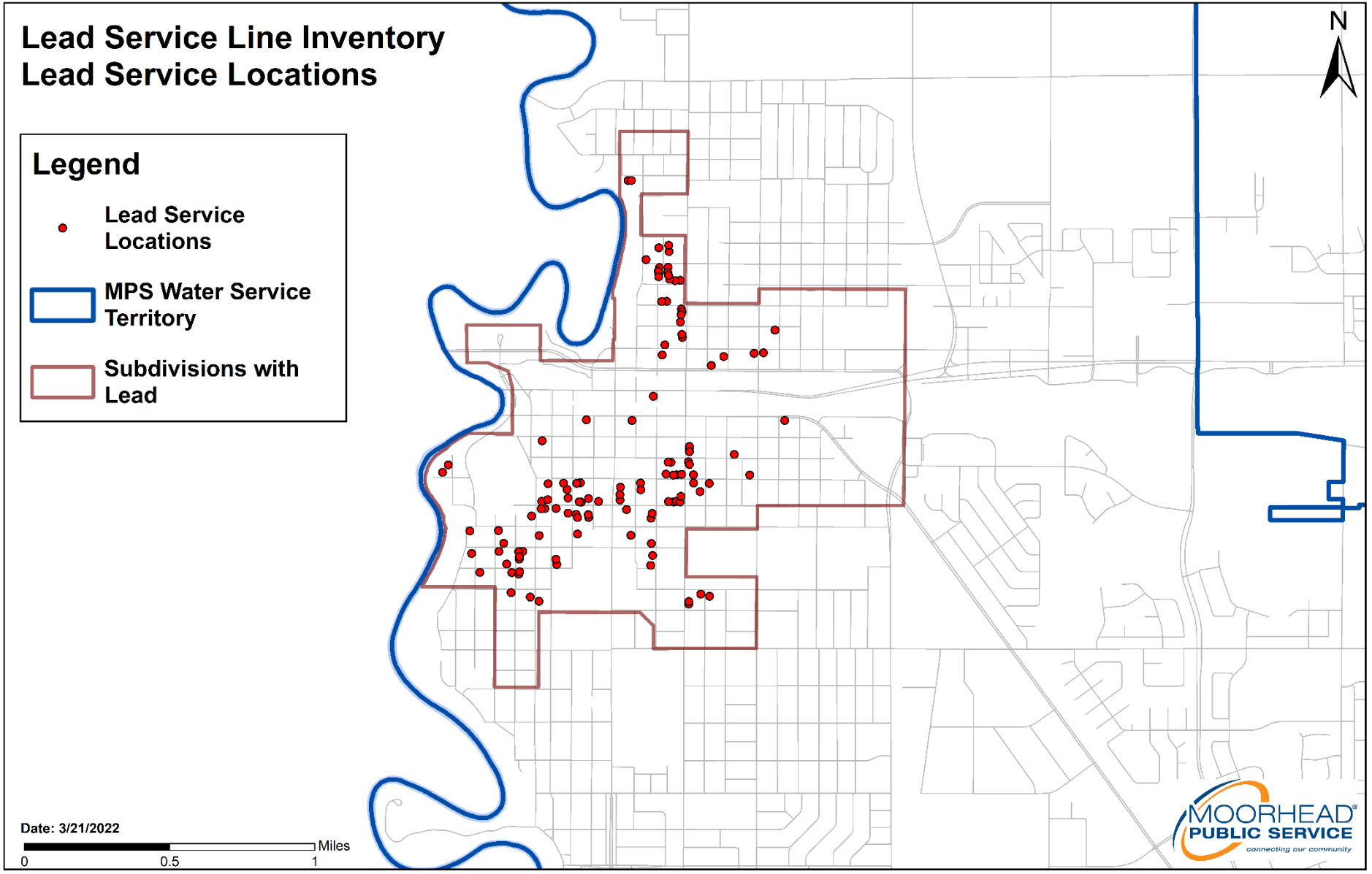
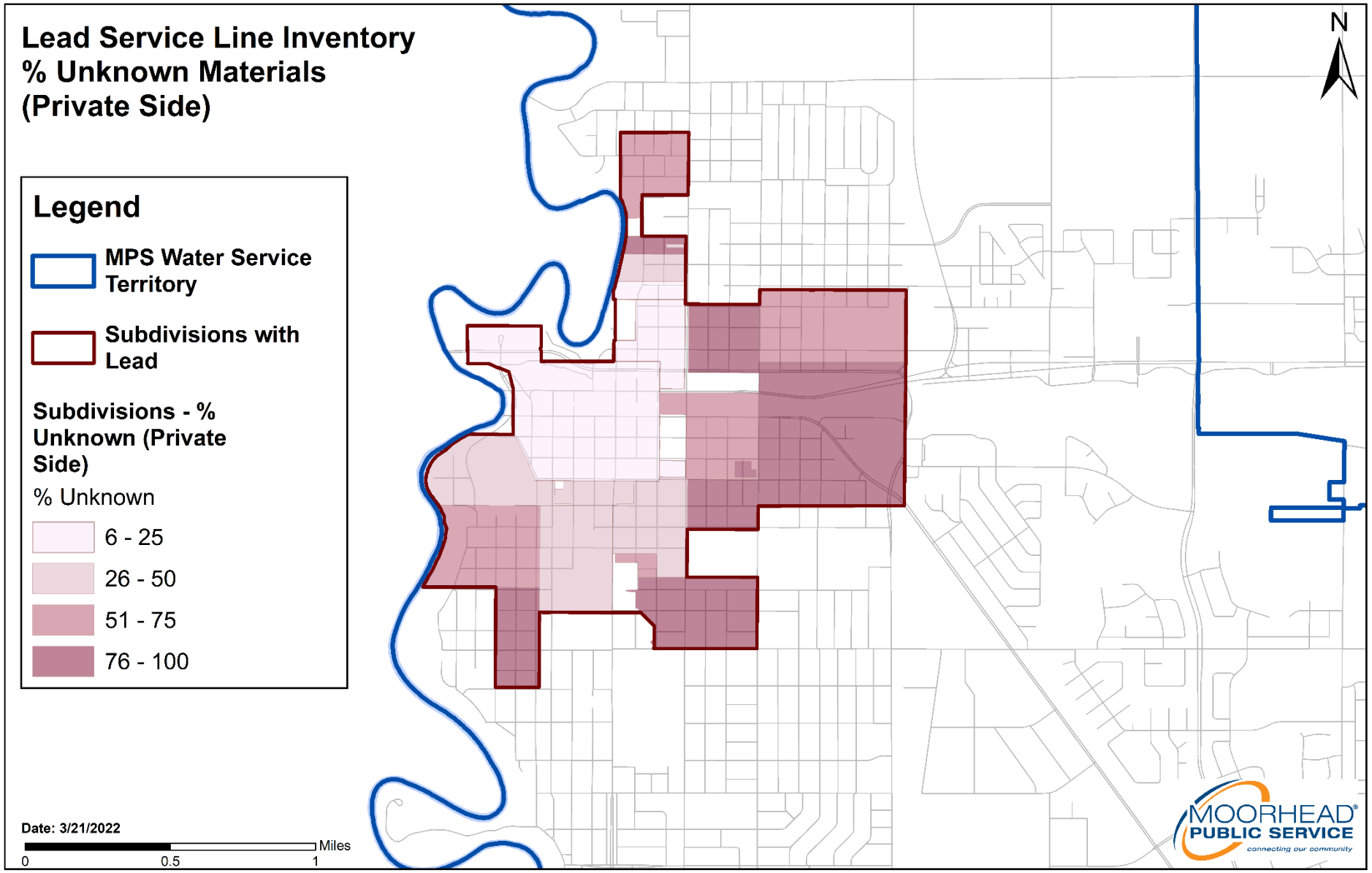
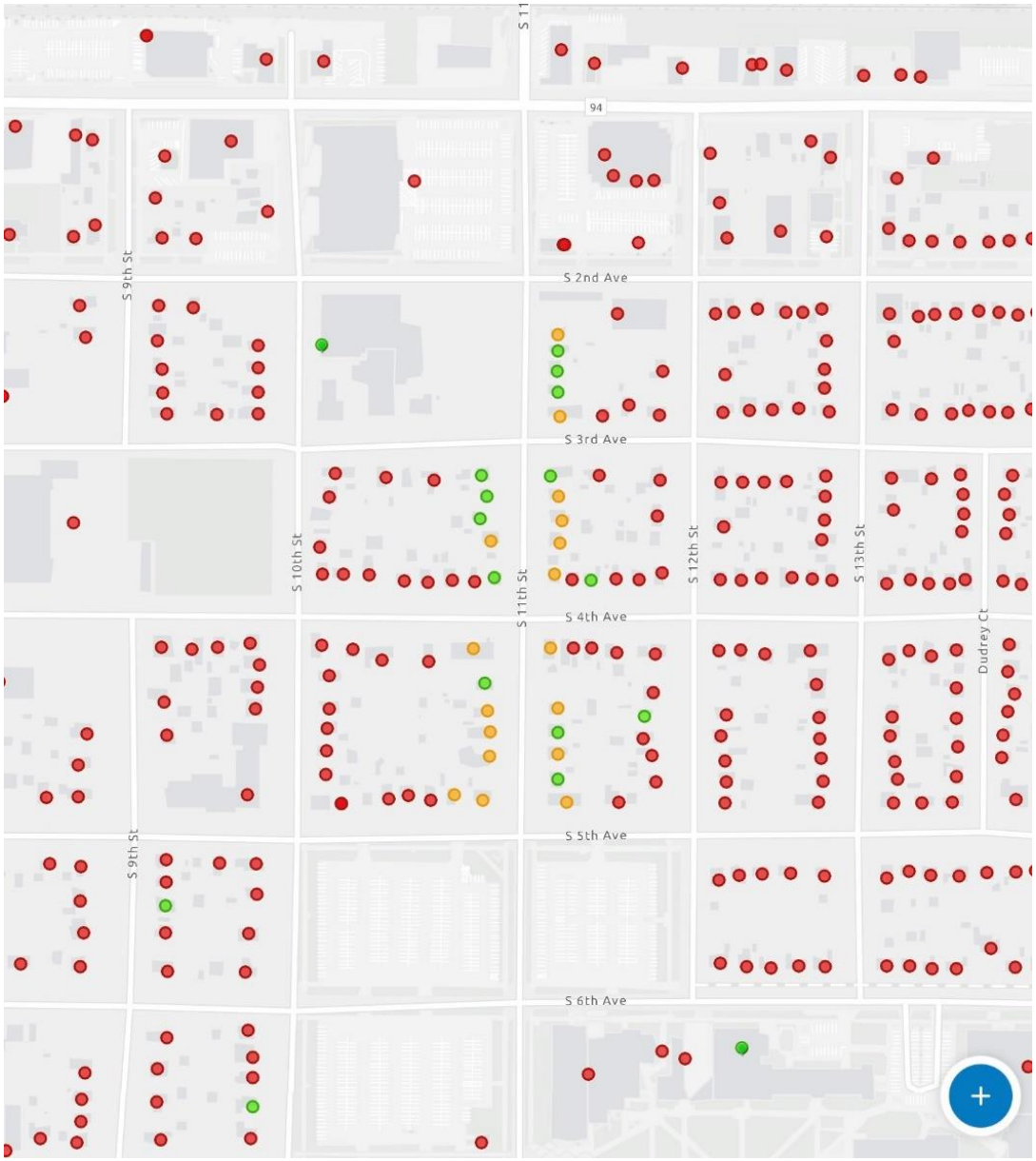
Lead Service Locations



Subdivisions – % Unknown Material



Internal Data Collection - ESRI Field Maps



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What Our Data Says

- ~27% of service lines currently unknown material (public & private)
- % of unknown is nearly even between public & private sides
- 116 known lead services (partial & full, public & private)

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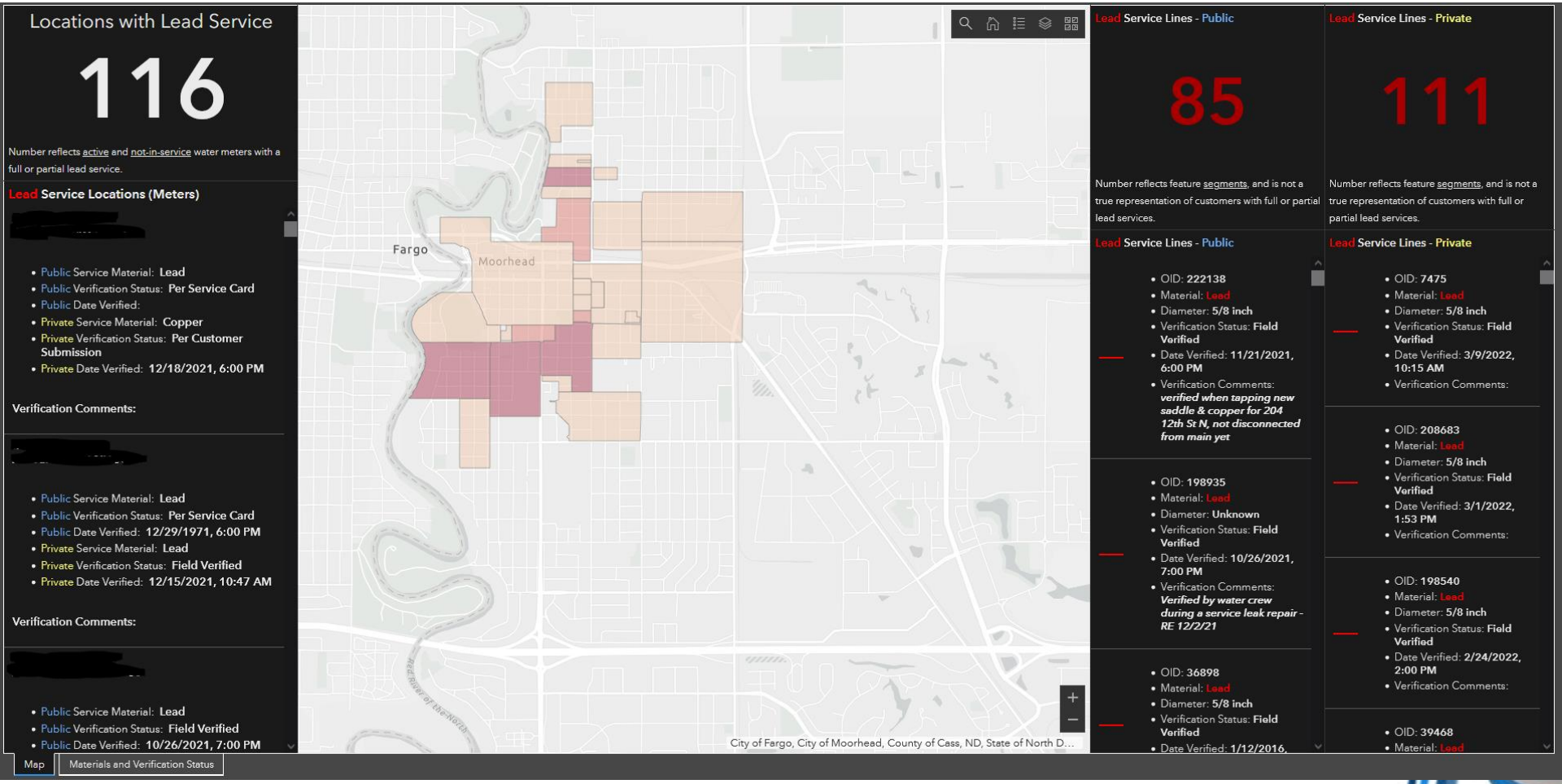
LSLI - Operations Dashboard



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What's Next

- Data clean-up and standardization
- Continue search for records/material information
- Mail postcards & door-to-door verifications
- Public-side verification?
- Replacements?

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Thank you!

Questions?

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