

# Investigating Side Sewer Assistance Options for SPU Customers

CDWAC

9/14/16

Seattle  
 Public  
Utilities

# Outline

- Current Effort & Approach
- Side Sewers Explained
- Defining the Problem
- Solutions Used Elsewhere
- Next Steps

# Project Overview

- Problem Statement
- Team is tasked with:
  - Identifying solutions used by other utilities
  - Conduct options analysis
  - Provide draft recommendation to SPU leadership
  - Circle back with CDWAC for input!

# Side Sewers Explained

- What is a side sewer?
- Who owns them?
- Who maintains them?



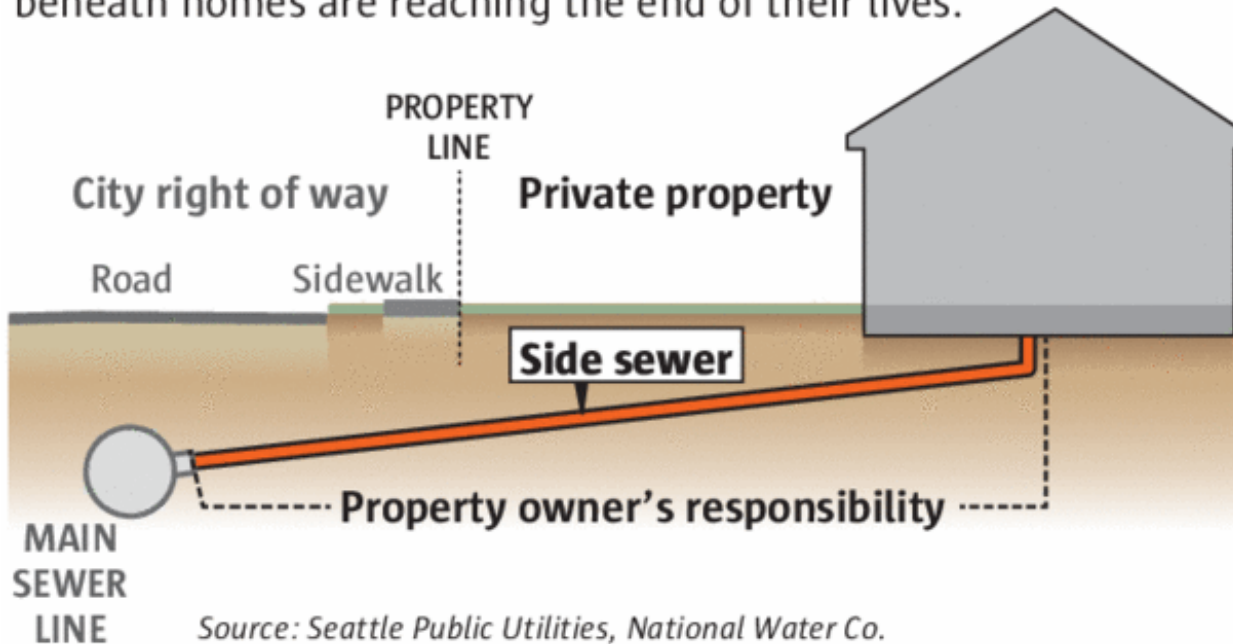
# Side Sewers in Seattle

- Why are they important?
- Are they all the same?
- By the numbers:
  - ~1400 miles of sewer mains
  - ~4100 miles of side sewers
  - ~5500 total miles of pipe

# What is the Issue?

## Seattle faces rising number of side-sewer failures

Half of Seattle's housing was built before 1961, and the sewers beneath homes are reaching the end of their lives.



Source: Seattle Public Utilities, National Water Co.

MARK NOWLIN / THE SEATTLE TIMES

[http://o.seattletimes.nwsources.com/html/realestate/2028178107\\_sidesewersxml.html](http://o.seattletimes.nwsources.com/html/realestate/2028178107_sidesewersxml.html)

# Exhibit A: Side Sewer Permits

## Permits to fix Seattle side sewers rise sharply

City permits show contractors are keeping busy fixing Seattle side sewers, which are failing in large numbers due to age and other factors.

### SIDE-SEWER PERMITS ISSUED BY CITY OF SEATTLE

*by year and by category of property*



Source: City of Seattle

MARK NOWLIN / THE SEATTLE TIMES

# Why is it important to SPU?

- ❑ Failures can cause backups into customer's buildings & other property
- ❑ Increases costs to SPU
- ❑ Repair costs can be a hardship on customers
- ❑ Customer costs can vary greatly from one building to the next



# What's the Issue?

- Average age
  - All buildings in Seattle = 72
  - Buildings with repair permits (2005-14) = 66
- 5-year average repair permits/year = 2260
- Total number of connections ~ 130,000
- Increase in permits from 2008-15 = 68%

# Policy Goals

- Draft policy recommendation goals:
  - Reduce costs for customers
  - Increase service equity
  - Improve service options
  
- *Effort is not focused on:*
  - Sewer Backup Prevention
  - Inflow & Infiltration

# What's Most Important?

- Ranking Criteria prioritized
  - Customer Service Equity
    - *Does the solution address customer costs?*
    - *Would many people be eligible?*
    - *Does the solution require a lot of effort on the customer's part to understand and take part in?*
    - *Could the solution account for socioeconomic differences that exist in Seattle?*
  - Timeliness
  - Utility Rates

# What Have we Found so Far?

- Comparing Seattle to others
  - SPU not too dissimilar from other large cities when it comes to private side sewers
  - Seattle dissimilar from most cities according to 2015 Water Environment Federation Survey
  - Requirements for pavement restoration can be a cost driver for customers
  - Many customers repair their side sewers each year

# What are Current Drivers?

- Often, Consent Decree with EPA (not the case in Seattle)
- Combined or sanitary sewer overflows
- Jurisdictions or utilities develop programs aimed to:
  - Reduce CSO's & SSO's
  - Reduce inflow & infiltration (surcharge in pipes)

# Initial Approaches

- Outreach & Education
- Utility Managed Side Sewer Programs
- Financial Incentives
- Warranty/Insurance Programs
- Regulations or Code Solutions
- Operations & Maintenance

# Outreach and Education

- Geared to encourage customers to be proactive
- Social-based marketing techniques
- Customer notification
  - Example: Los Angeles Root Notification Program

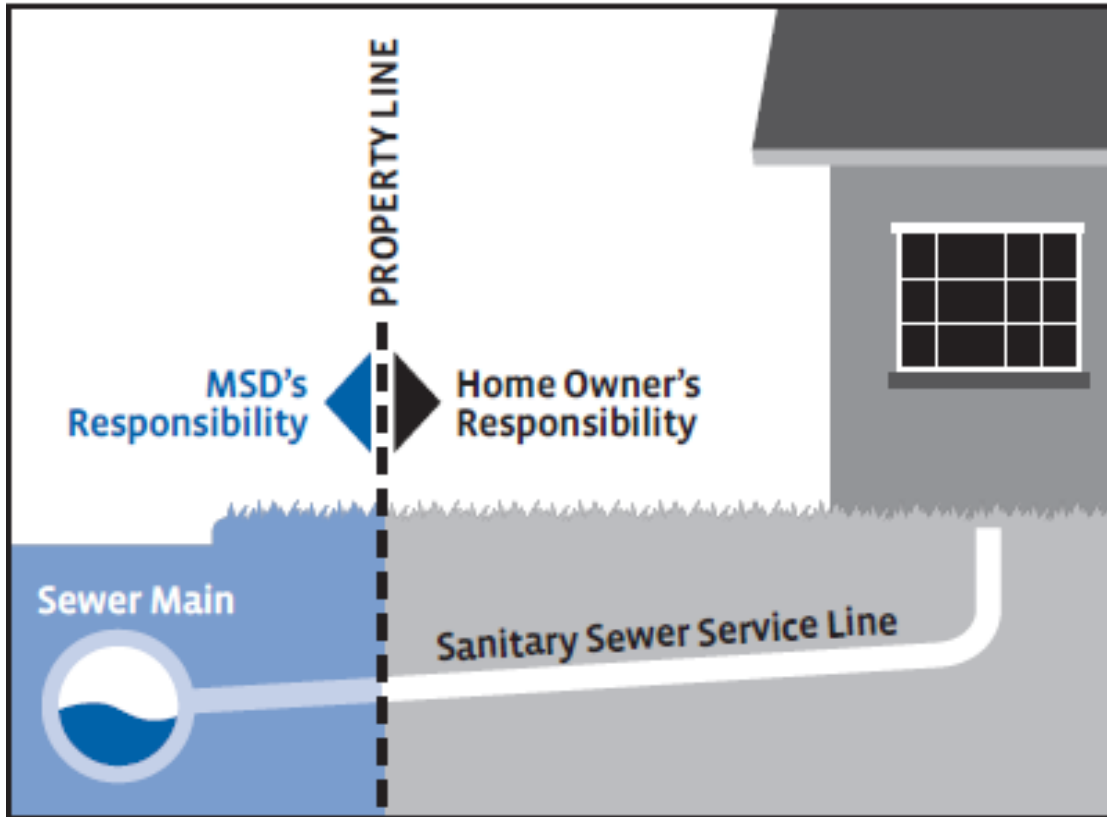


# Utility Side Sewer Maintenance, Repair or Replacement

- Utility maintains some portion of side sewer between sewer main and building
  - Most often within the right-of-way
- Examples: San Antonio, Washington D.C., Louisville, San Diego\*



# Utility Side Sewer Program



Side sewer ownership as defined in Louisville, KY

# Financial Incentives

- Loans, grants, rebates, and reimbursements aimed to reduce the upfront or out of pocket costs of side sewer replacement and sometimes, restoration in the right of way,
  - Utility or 3<sup>rd</sup> party managed



- Examples: Philadelphia, Boston, Louisville

# Warranty / Insurance Programs

- Aimed to reduce total costs of side sewer repair and replacement for customers
- Utility or 3<sup>rd</sup> party managed
  - St Louis County, MO
  - Several vendors (local and national) currently serving Seattle market



# Regulatory or Code Solution

- Closed-circuit TV verification and certificate requirement triggered by:
  - Property transactions
  - Water service level changes
  - Remodel projects that meet a given dollar threshold (e.g. \$100k);
  
- Example: East Bay MUD

# \*Operations & Maintenance

- Utility performs some aspect of inspection or maintenance of side sewers during routine O&M

*\*Not found in literature or options research*

# *\*Opportunistic*

- Customer notification in advance of capital improvement projects or O&M
  - Major road repair projects
  - Sewer main repairs

*\*Not found in literature or options research*

# Summary

- Many approaches:
  - Reduce costs for customers
  - Fix broken side sewers
  - Have worked very well (and, in combination)
  
- In some cases, the approach didn't work
  - East Bay MUD Private Sewer Lateral Program
  - Incentive did not entice additional customers to opt-in

# Next Steps

- Team currently evaluating options
- Economic analysis of top option(s)
- Revisit CDWAC to gather input



# Questions?