

Tyler Cummings, Sustainability Analyst



Introductions



Tyler Cummings

Sustainability Analyst, Leaks Specialist, Nerd



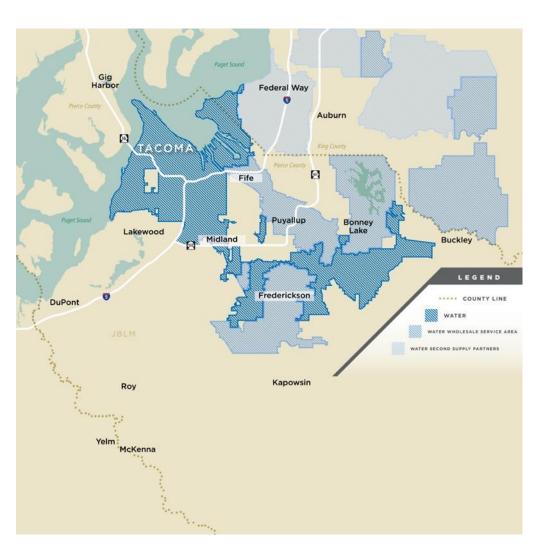






About Tacoma Water





- 119 square miles of service area
- 278 employees
- 101,197 residential customers (61% inside city limits; 39% outside city limits)
- 6,945 commercial and industrial customers
- 1,428 miles of water mains
- Up to 150 million gallons per day from the Green River
- 40 million gallons per day from local wells

Context: Advanced Meter Project



- Water Meters needed replacing
 - Meters at end of life
- Responding to customer requests for new features
 - Monthly billing
 - Selectable bill due date
 - Faster outage and leak detection
 - Detailed, near real-time usage information through a customer web portal
- Mass deployment began in 2021
 - Joint project between Tacoma Water and Tacoma Power



Advanced Meters - Tacoma Public Utilities (mytpu.org)

The Problem





- Older service territory with some 100+ year old service line materials
- Galvanized steel service lines
- High risk for failure when re-energizing
- Not likely to be adequately repaired with a partial service line replacement
- COVID-19 contributing to financial constraints for customers
- Customers may need assistance working with contractors
- Customers with longside or "shoestring" service lines

The Problem



We needed to:

- Provide avenues for restoring water service for customer impacted by AMI mass deployment in a timely manner
- Administer repair support in an equitable manner
- Have an actionable solution available for any impacted customer.

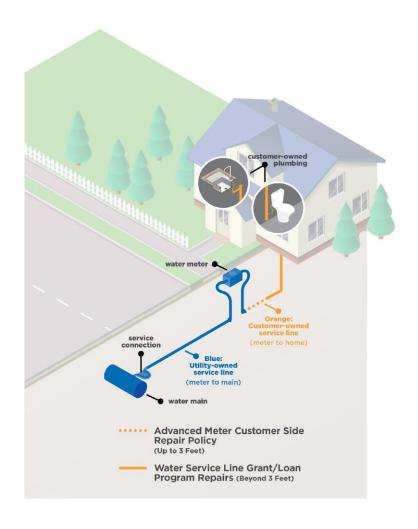
We also wanted to:

- Support efforts to newly enroll more unreached income eligible customers for TPU's payment assistance programs.
- Assess the equity of our program implementation
 - Were we reaching everyone fairly?

The Solution



- Advanced Meter Customer Side Repair Policy (limited duration – during water AMI mass deployment)
- 2. Water Service Line Grant and Loan Program (intended to extend beyond scope and duration of advanced meter project)
- 3. Claims process for all customers if damage or claimed Customer Impact is disputed or exceeds the criteria listed (i.e internal leaks/impacts)



The Solution



Water Service Line Grant and Loan Program (WSLGLP)

Financial assistance for replacing an aged or leaking water service line (meter to where line enters house).

- Zero interest loan
- Grant for income-qualified customers

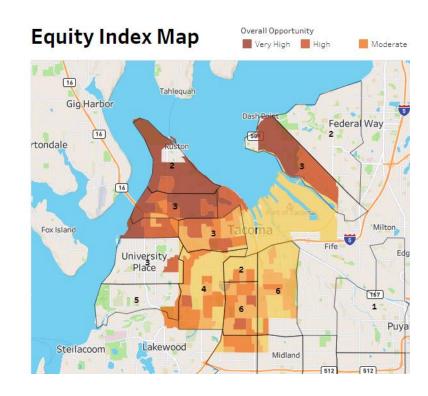
Requirements

- Residential water customers only
- Homeowners only
- TPU-directed inquiry regarding leak had to occur within 45 days of meter exchange
- Must have an active leak
- Must be a licensed, insured, bonded contractor
- Estimate must be review and revised to align with program requirements
- Covered only water service line full replacements (no partial replacements)

Equity-Informed Program Design



- Another vehicle to enrolling customers in TPU's utility bill assistance programs
- \$5k Grant available for income-eligible applicants with deferred loan for additional repair costs
- Scalable loan repayment terms based on loan amount to keep payments manageable (based on EPA Affordability data)
- No interest bearing on any loan offering (outside of penalty APR for significantly delinquent loans)
- No credit inquiry required for credit evaluation
- List of trusted local contractors for customers to work with
- Temporary configuration to \$20 payments for income-ineligible applicants who express hardship
- Paper version of application for customers not able to apply online



Supporting Conservation



- AMI-enabled leak alerts identify opportunities for water conservation.
- The Water Service Line Grant and Loan Program supports conservation by providing the customer with financial resources to locate and fix a leak.
- It is in the best interest of Tacoma Water, the customer, and water conservation to identify and fix leaks right away.
- Quick action reduces unnecessary water consumption by the customer, saves treatment costs, and overall system demand.



The First Year



April 2021 – June 2022

- One qualified replacement
- Sole approved case did get enrolled in bill credit assistance plan (BCAP)
- Eligibility requirements proved to be prohibitive for most applicants
- Not actively communicating to customers about program yet
- Evaluation of program and processes for improvement, refinement, and expansion



Program Adjustments



June 2022

- Eligibility requirements were too restrictive
- Expanded eligibility to include all residential water customers with 5/8" – 1" meter, regardless of AMI-enabled status
- Established tiered funding priority to ensure AMI-impacted customers would be supported throughout deployment



Results



- Immediate influx of qualified applicants were assisted with replacements
- 9 water service line replacements between June 2022 and December 2022
- 48 total repairs funded to date (44% grants)
- 13 trusted contractors added to the list
- Multiple service line replacements decisioned within business day
- Additional expansion to include End-of-Life repairs



Challenges & Focused Improvements



Challenges

- Influx of unqualified applications due to leak letter going live for continuous water usage
- Number of qualified applicants also increased dramatically, making it difficult for staff to keep up
- Advanced Meter deployment moved to outlying areas, which didn't have trusted contractors identified

Focused improvements

- Streamlining active leak confirmation and flow rate on non-advanced meters
- Formalizing and refining program documentation needs
- Adding more trusted contractors to list
- Meeting in-person with plumbing contractor crews and permitting office staff
- Building program summary dashboard for internal visibility.

The Data





Water Service Line Grant and Loan Program Summary



Number of Repairs Funded

48

Number of Grant Repairs

21

Average Repair Project Total

\$7,729

Appx. Feet of Line Replaced

3.107

Calculated Water Saved (GAL)

79,149,228

Total Repair Assistance Issued

\$359,215

Total Grant Funds Awarded

\$103,357

Total Deferred Loan Assistance

\$47,745

Total Standard Loan Assistance

\$208,113

New LIE ① **Enrollments**

9

New BCAP ① Enrollments

10

Total LIE Savings to

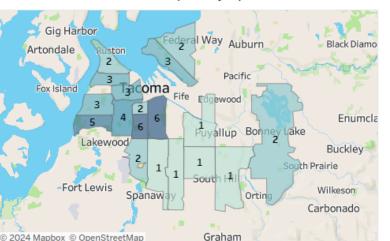
Customers

\$6,516

Total BCAP Savings to Customers

\$7,212

Number of Repairs by Zip Code



Collected in Smartsheet, the data updates automatically in the Tableau dashboard daily and is sent to stakeholders once a month via email.

Additional tabs show number of repairs funded over time and compared with Tacoma's Equity Index areas.

What's Next?





- Refined reporting: active cases dashboard
- Targeted customer outreach
- Coordination with Tacoma's Main Replacement Program
- Customers identified to have water service lines over 100 feet with continuous water consumption
- Sample contractor estimates for reference

Thank You!



Any questions?

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