

ADVANCED METERING INFRASTRUCTURE (AMI)

Update: June 2020



- Why AMI?
- Funding
- Customer Service Benefits
- Leak Detection
- Staffing Implications
- Customer Engagement
- Current Progress



Why AMI?

- Enhance metering capabilities and automated leak detection achieve the following goals:
 - Reduce data handling errors
 - Decrease under-recorded consumption due to aging or incorrectly sized meters
 - Improve data collection to reduce loss from unknown conditions
 - Increase customer access to consumption records in an effort to encourage water conservation



Funding

- Texas Water Development Board (TWDB)
 - State Water Implementation Fund for Texas (SWIFT)

City of Waco received a \$12 million, low interest SWIFT loan from TWDB to finance the AMI project.

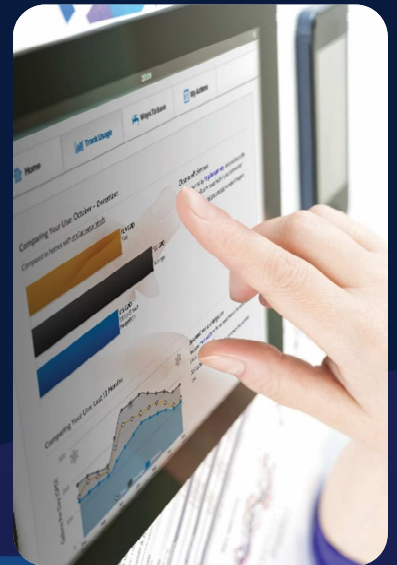


Customer Service Benefits

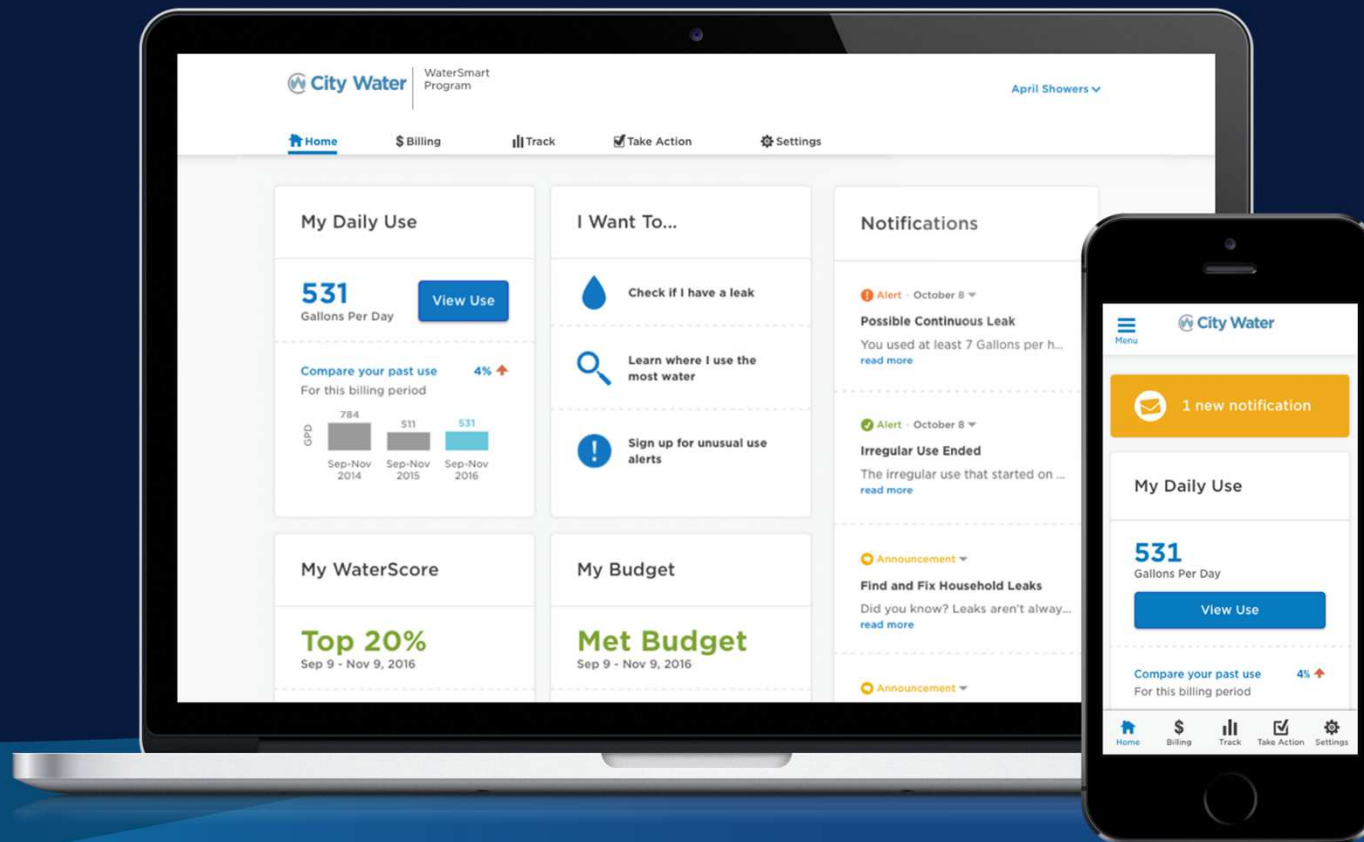


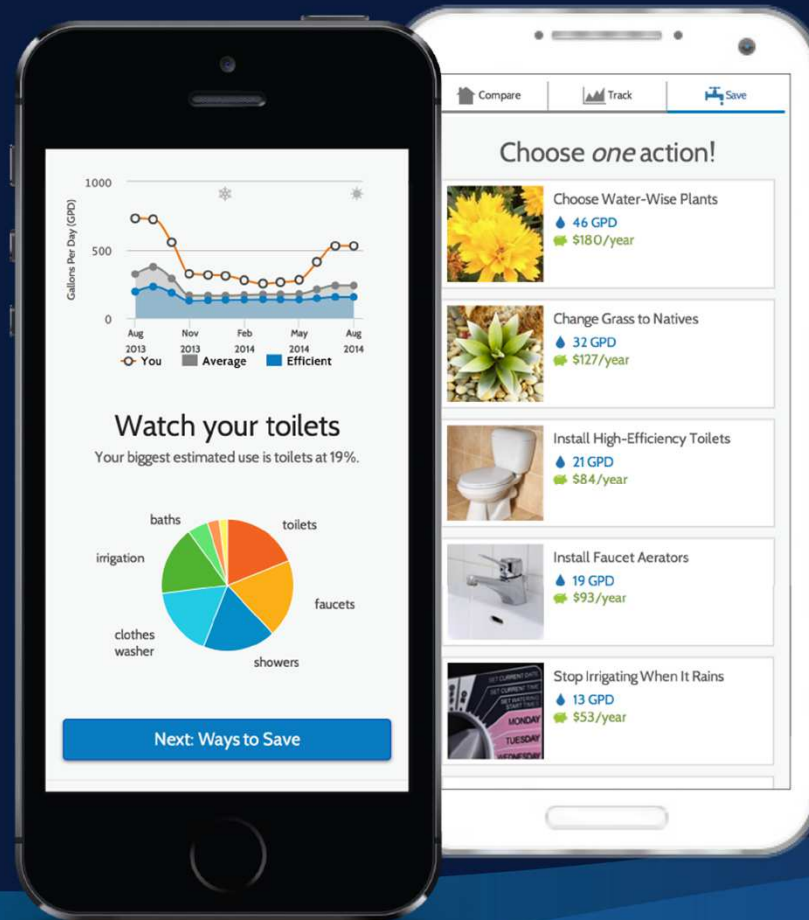
Enhanced Customer Service

- Allows customer direct access to consumption records
- Facilitates enhanced communication with customer through e-mail / text notifications
- Early notification to customers of potential leaks or excessive water use can minimize unexpected charges and disputed utility bills



Online Customer Portal





Customer access
to alerts and data
that enables
saving water and
money



Leak alerting & resolution

City Water WaterSmart Program 5404 Daisey Ave
906910329601

Irregular Water Use: You may have a leak

! **Irregular Water Usage**

Your water has been running continuously for 6 days, starting at 2am on Thursday, March 24, 2016.

[Investigate possible leak »](#)

Continuous use is often an indication of a running toilet or leaky irrigation valve.

ESTIMATED GALLONS LOST 1,155	ESTIMATED DURATION 6 days	% OF YOUR TOTAL USE 57%
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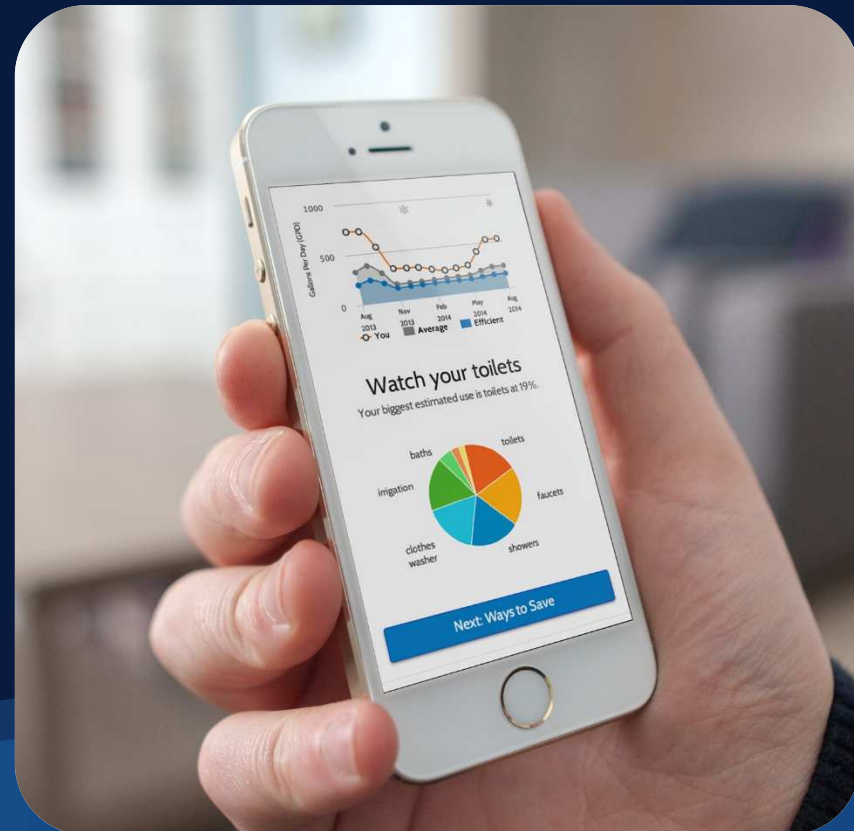
What's Next?

1. Check for leaks

[Here's how »](#)

2. Tell us what you found.

[I found a leak »](#) [This was not a leak »](#)



Leak Detection



Automated Leak Detection

- AMI network supports deployment of leak detection sensors for Continuous Acoustic Monitoring
 - Acoustic sensors placed all over city (approx. every 4th service) provide continuous leak detection
 - Real-time data allow quick response to leaks



Automated Leak Detection

- Find small leaks sooner, while easier to repair with less damage and less water lost
- Improved management of distribution system and higher level of customer service



OLS Acoustic Sensor



STAFFING

- Currently, 16 positions in Meter Services
 - One Supervisor
 - Nine licensed Water Distribution Operators
 - Six Utility Workers
- Several staff members' job duties will be refocused to preventative maintenance



Customer Engagement Communication/Education



Communications about Field Work

- Press Release ✓
- Community Meetings ✓
- Message on outside of bill envelope ✓
- Bill Insert ✓
- Website ✓
- Facebook ✓
- Door hanger ✓



Bill Insert



The City of Waco will soon be hard at work on something very exciting!

ADVANCED METERING INFRASTRUCTURE (AMI) with *Smart* Meter Technology

For more information visit: www.WacoWater.com

Coming Soon to Your Water Meter!

direct access
to water
consumption data



high degree
of recording
accuracy



leak alerts



high usage
threshold alerts

text and email
notifications



online
customer
portal



More Customer Communication

- Web - www.WacoWater.com
 - AMI / “Smart” Meter Section
 - FAQs
 - Images of meter devices, transceivers
 - Info about how the AMI system works
 - Project Information at: www.BuildingWaco.com
- Social Media
 - Tips and facts about how AMI can save water
- Sign-Up Campaign
 - Campaign across all channels to encourage sign up for the (WaterSmart) customer portal



Sign-Up Campaign



Post Card



Bill Insert

AMI PROJECT	Feb 2018 – April 2018	May 2018 – Dec 2019	Jan 2020 – Aug 2020	Sept 2020 – Oct 2020	Nov 2020 –
Project Kick-off Meeting					
Begin Site Surveys for Fixed Network Locations					
Complete Project Plan					
Equipment Delivered					
Press Release, Website Updated					
Training for Staff					
Fixed Network Installation					
Testing of System Integration with Billing & Customer Portal					
Business Process & Technical Support Training					
Community Meetings, Bill Insert, Facebook, Door Hangers					
Installation of AMI					
Customer Portal Campaign					

- Installations Complete - 74.50% (33,389 out of 44,820) 11,431 remaining
- City installs should be completed by end of August
- City staff completed all retros for 3" and larger except 2 so far.
- City took over the 3" and larger installs/retros and currently has installed 71 out of 295. (The project will be over budget and this area allows for the largest budgetary impact.)

- City has installed 448 meters out of 2034 so far in cycle 4. (Accounts for the amount of meters added to the system since the project started, which are not accounted for in the scope of this project).
- Itron is mobile reading 10 cycles currently.
- Itron and subcontractors have now worked 743 days out of the allotted 700.
- Itron is projecting completion in early fall.



- Currently on third project manager for this project
- Oncor has declined request for installing the CGRs on their poles. (Oncor would not allow the type of attachments Itron needed). Currently looking at signal poles for installation of CGRs.
- Installers have had major staffing issues. Neither of two contractors has been able to maintain the projected level of staff needed to be successful.