This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Keep Austin Wired – Guiding Water Efficient Behavior in a Mobile World

Water Smart Innovations
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About Austin Water

• Large metropolitan utility
  – 548 square miles
  – 225,000+ connections
  – 1,000,000 customers
  – 3,807 miles of mains
    (both transmission and distribution)

• 100% surface water from lower Colorado River
  – Firm water rights backed by stored water contract up to 325,000 acre-feet/year
  – Peak withdrawal ~ 175,000 acre-feet/year
Mature conservation program

• Active/evolving conservation programs since 1983

• Early emphasis on efficient fixtures; later emphasis on efficient practices & regulations


• Peak day and total GPCD goals;

• Peaking factor and delay water supply contract payment
~28% reduction in Total GPCD over five year rolling average.
Incentive program trends

- Traditional “low hanging fruit” implemented
- Many programs phased out due to federal manufacturing standards, market saturation, and state/local requirements
- Shifting focus to high use areas, auxiliary water, higher standards for new development, and innovative technology and methods
Customer engagement and behavior modification

- Put more information into hands of customers
- Leverage social norms to change behavior by comparing customer’s water use with similar and efficient homes
- Give feedback to the customer on water and cost saving ideas and rebates
- Engage customer to set goals
Customer Satisfaction

• An effective utility is responsive to customers and receives timely customer feedback to maintain responsiveness to customer needs and emergencies. (Effective Utility Management - A Primer for Water and Wastewater Utilities)

• Mobile apps provide the best customer experience (J.D. Power 2017 Utility Website Evaluation Study)

• Many low income customers use smartphones as their primary communication device (Pew Research Center. “Technology Device Ownership: 2015”)
Platform selection criteria

- “Native” mobile app and web based
- Custom home water use reports
- Analytics package

- Push alerts
- Intuitive
- Flexibility
- Cost
Provide actionable information

- Contextual water usage
- Rate tiers and costs
- Suggested measures, and fixtures
- Goal setting/surveys
- Leak notifications
- Push alerts (e.g., service outages, boil water notices, smoke testing, line breaks/repairs)
Program Results 2015-16

• Over **15,000** signed up
• **9%** aggregate water savings
  **17%** savings among high-use customers
• **41 million** gallons saved (attributable to program)
• Increased customer engagement, initiation of the “Conservation Conversation”
• Cost-effective outreach – rebates, push alerts, announcements
Customer response

• 86% prefer native iOS and Android mobile apps (negligible mobile browser use).

• Increased interest in having “smart meter” data, leak alerts

• 88% would recommend to a friend.

Jeremy B. Mazur @jeremybmazur · 16 Sep 2015
Props to @AustinWater for enabling residents to use @dropcountr app to monitor our #txwater use! Great tool for wise water use!

Devin Price @devinsays · 6 May 2015
I can now track house water usage from my phone! Thanks @dropcountr. #data #nerd

morgan bickie @morganbic · 1 May 2015
Just installed the @dropcountr app to track my households water usage, pretty good experience so far

Karthik Gaekwad @iteration1
kudos on the @austinwater integration with @dropcountr! Gives you insight into your water usage compared to folks around you.

Miró Cassetta @miro_cassetta
Way too excited about @dropcountr for @AustinWater! I’ve got some serious cutting down to do. #conservewater #goals

Your household (13,800 gal.)

Similar households (23,600 gal.)
Lessons learned

• Cost/benefit of home water use reports should not be based on water savings alone
  – Expected water savings will vary among utilities and customer
  – Of equal benefit is the ease, speed, economy, desirability, access and “friendliness” of customer engagement and communication using an “opt-in” native mobile app
  – Many mailed “opt out” reports returned, less-interactive
  – Multi-faceted benefits and services should be equitably provided to all residential customers regardless of individual water savings potential
What’s Next

• Provide Spanish language version

• AMI pilot study
  – Cost and technical feasibility study
  – Up to 160 smart meter pilot participants with near real time water use data and leak alerts

• Explore possibility of ICI/MF portals
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