#### Affordability: Background, Best Practices, WSSC Overview, and Next Steps

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#### A note on words and abbreviations

- CIS customer information system
- *CSR* customer service representative
- EITC earned income tax credit
- FPL federal poverty level
- HH household
- MHI median household income
- *SF* single family
- SNAP supplemental nutritional aid program (food stamps)
- Water bill combined bill for water and wastewater service



### Background

#### What is affordability?

- Ability to pay for water service in full and on time
- Without jeopardizing ability to pay for other necessities
  - Food
  - Medical care
  - Housing (rent, mortgage, other essential utilities)
  - Transportation
  - Child care



#### Is there a "magic number"?

No

- US EPA uses "magic numbers" for affordability at the *utility level* to determine ability of *utility* to afford to comply with regulatory requirements:
  - Average water bill  $\leq 2.5\%$  of MHI
  - Average sewer bill  $\leq 2.0\%$  of MHI
- Thresholds based on MHI have little to do with an individual *household's* ability to afford to pay the water bill



# Are there indicators of affordability problems?

- Food Insecurity
  - Limited or uncertain availability of nutritionally adequate and safe foods, usually due to lack of income (~13% of HH in US)
- Receipt of Other Utility Aid
  - Energy assistance
  - Telephone lifeline assistance
- Qualify for Earned Income Tax Credit
  - Varies by no. of children, income and other factors
  - Annual credit averages > \$2,400 for eligible HH



#### Water Utility Best Practices

#### **Useful Resource**

*Best Practices in Customer Payment Assistance Programs*,

Funded by the Water Research Foundation and US EPA (2010), available at no cost:

http://www.waterrf.org/PublicReportLibrary/4004.pdf



#### Background

- Options depend on system capabilities (CIS, etc.)
- Bad debt, customer service, and collections activities are costs borne by <u>paying customers</u>
- Business decisions should be made based on relevant factors which may include:
  - Benefit-cost (\$ collected vs. \$ expended)
  - Perceived fairness (similar customers treated similarly)
  - Consistent with other goals (e.g., conservation, homelessness)
- Treat as business process, including feedback loop (continuous improvement)



#### **Business process overview**

- Shrink the bills
- Shrink the overdue caseload & arrearages
- Shrink the cost of collections
- Understand and enhance support functions
  - Legal
  - Training
  - Communications
- Measure performance
- Implement continuous improvement process



#### **Know Your Customers**

- Late pay vs. no pay
- Underlying reasons / customer types
  - Lack of money
  - Lack of budgeting skills
  - Able but unwilling ("gaming", perceived unfairness)
  - Crisis (lost job, high medical bills, death in family)
  - Seasonality (income, other bills, water bill)
  - Physical payment problem
    - 25.6% of households with income < \$15,000/yr have no bank account (2015 FDIC National Survey of Unbanked and Underbanked Households (October 2016))
- Requires account analysis, segmentation, strategies



#### Segmentation example

Customer problem	Potential solutions
Lack of money	Utility or third party assistance program; enhance usage of existing programs (EITC, SNAP, heating assistance, school lunch, telephone lifeline)
Budgeting skills	Skills training; utility billing options (see next page)
Gaming	Enforcement
Crisis	One-time emergency funds (utility or third party)
Seasonality	Budget billing (see next page)
Payment logistics	Banking partners; payment kiosks; in- person options



#### **Potential Billing Options**

- Monthly billing option
- Billing on same day of month
- Budget billing same bill amount each month
- 11-month billing ("skip-a-month")
  - Customer effectively prepays to avoid having to pay in month when other expenses high or income low



#### **Potential Customer Service Options**

- Targeted reminders (before and/or after due date)
- Separate CSRs trained to deal with particular customer segments
- Partnerships with community organizations
- Referrals to community organizations
  - Access to funds / other assistance
  - Budget assistance
  - Banking assistance (facilitates budgeting, timely payment)



### What do we know about Montgomery & Prince George's Counties?



#### **Useful information sources**

- US Census American Community Survey 2015
  - Microdata by county (accessed from: IPUMS USA, University of Minnesota, www.ipums.org)
  - Sample of more than 38,000 households representing almost 670,000 HH in Montgomery and Prince George's Counties
- US Internal Revenue Service data on EITC
  - Complete data by county
- USDA data on food insecurity
  - Available only by state due to sample size
- LIHEAP Clearinghouse; National Energy & Utility Affordability Coalition



#### Households by type of building



here Water Matters

#### Households that pay a water bill



#### Single-family homes by income



Source: Analysis of ACS Microdata



### Percent of income paid for water by single-family homes



< 0.5% < 1.0% < 1.5% < 2.0% < 2.5% < 3.0% < 3.5% < 4.0% < 4.5% < 5.0% < 5.5% < 6.0%



Source: Analysis of ACS Microdata

### Who pays > 4% of income for water?



#### EITC in Montgomery & Prince George's Counties (2014 data released in 2016)

- EITC recipients: 133,640
- Average credit: \$2,360
- 69% had income < \$25,000 / year</p>
- 31% had income between \$25K and \$50K/year
- Nationally, about 85% of eligible HHs apply for EITC

Data accessed from https://www.brookings.edu/interactives/earnedincome-tax-credit-eitc-interactive-and-resources/



#### **Food Insecurity**

- US Data for 2016
  - Food insecurity: 12.3% of HH (Maryland: 10.1%)
  - Very low food security: 4.9% of HH (Maryland: 3.9%)
- Who is likely to be food insecure?
  - Income < 130% FPL: 35.7% food insecure</li>
  - + one or more children: 40.7% food insecure
  - + single woman head of HH: 46.8% food insecure
- Montgomery & Prince George's Counties
  - ~73,000 single woman head of HH and < 125% FPL</li>
- USDA, Household Food Security in the United States in 2016, Economic Research Report 237 (Sept. 2017), and accompanying statistical supplement
- US Census, American Community Survey for 2015 (county data)



#### Home energy assistance

- Maryland federal LIHEAP assistance
  - FY 2017: \$74.0 million
- Maryland HH eligible vs. served (FY 2016)
  - Eligible: 665,000
  - Served: 104,000 (< 16%)</li>

US Dept. of HHS, LIHEAP Clearinghouse, https://liheapch.acf.hhs.gov/Funding/funding.htm NEUAC, http://neuac.org/wp-content/uploads/2017/03/FINAL-FY18-LAD-State-Sheets-21.pdf



#### Some preliminary take-aways

- WSSC is not immune to problems of low income, including water bills as a large percentage of income, but problem is comparatively small
- Rough estimate: about 15,000 customers may have serious ability-to-pay problems
- Of SF HHs with incomes < \$25,000/year, about 1/3 have water bills > 4% of income
- Rate design changes may not be effective in addressing ability-to-pay problems
  - Relatively small group of customers
  - High usage / lower income
  - Be careful of high fixed charges



## Short Term (< 2 years; existing CIS)

- Learn as much as you can about poverty, seniors living alone, single mothers in SF housing in service area
- Develop / enhance partnerships with community organizations and other agencies & service providers
- Work to maximize use of other aid programs (EITC, heating and telephone aid, school lunch, SNAP, etc.)
- Investigate targeted conservation programs
- Investigate possible monthly billing options
- Investigate payment options for "cash only" customers
- Understand & enhance collections business processes for different types of customers
- Review existing Customer Assistance Programs and revise them in light of what you learned from other short term steps



#### Longer term (2 years; new CIS)

- Investigate / implement billing options
  - Monthly billing
  - Pick a date
  - Budget billing
  - Skip a month
- Investigate / implement targeted reminders
- Capture data on payment-troubled customers
- Customer segmentation analyses
- Train some CSRs to work with specific segments
- Develop / implement continuing self-assessment program



#### Resources

- AWWA, Thinking Outside the Bill: A Utility Manager's Guide to Assisting Low-Income Water Customers (2<sup>nd</sup> edition 2014), https://www.awwa.org/portals/0/files/resources/water%20utility%2 Omanagement/thinkingoutsidethebill-2ed.pdf
- Cromwell, et al., Best Practices in Customer Payment Assistance Programs (WRF 2010), http://www.waterrf.org/PublicReportLibrary/4004.pdf
- Clements, et al., Customer Assistance *Programs for Multi–Family Residential and Other Hard–to–Reach Customers* (WRF 2017), <u>http://www.waterrf.org/PublicReportLibrary/4557.pdf</u>



#### **Biographical Statement for Scott J. Rubin**

Scott Rubin is an independent attorney and consultant whose practice has been devoted exclusively to issues affecting the public utility industry for more than 30 years. He began that practice in 1983 with the Pennsylvania Office of Consumer Advocate, rising to the rank of Senior Assistant Consumer Advocate. He chaired the Water Committee of the National Association of State Utility Consumer Advocates (NASUCA) from 1990-1993. During the early 1990s, he represented NASUCA on two federal advisory committees established by the U.S. Environmental Protection Agency, including the Disinfection / Disinfectant By-Products (D/DBP) advisory committee that led to the promulgation of a series of new water quality regulations. As part of his work on the D/DBP committee, Mr. Rubin presented some of the first comprehensive work on the affordability of water service to lower-income consumers.

Since that work 25 years ago, Mr. Rubin has been among the nation's leading researchers, lecturers, and expert witnesses on issues relating to the affordability of water and wastewater service. He has testified on water affordability issues before two committees of the U.S. House of Representatives and consulted on affordability issues for US EPA's National Drinking Water Advisory Council and New York City's Department of Environmental Protection. He also served as a member of Detroit's Blue Ribbon Panel on Affordability and as a mediator for the Philadelphia Water Department on issues affecting low-income water customers.

His relevant publications and presentations at national conferences include:

S.J. Rubin, "Are Water Rates Becoming Unaffordable?," Journal American Water Works Association, Vol. 86, No. 2 (February 1994), pages 79-86.

"Are Water Rates Becoming Unaffordable?," a speech to the Legislative and Regulatory Conference, Association of Metropolitan Water Agencies, Washington, DC. 1994.

S.J. Rubin, "Water Rates: An Affordable Housing Issue?," *Home Energy*, Vol. 12 No. 4 (July/August 1995), page 37.

Scott J. Rubin, "A Nationwide Look at the Affordability of Water Service," *Proceedings of the 1998 Annual Conference of the American Water Works Association*, Water Research, Vol. C, No. 3, pages 113-129 (American Water Works Association, 1998).

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American Water Works Association, *Principles of Water Rates, Fees, and Charges, Manual M1 – Fifth Edition* (AWWA 2000), Member, Editorial Committee.

Janice A. Beecher and Scott J. Rubin, presentation on "Special Topics in Rate Design: Affordability" at the Annual Conference and Exhibition of the American Water Works Association, Denver, CO. 2000.

Scott J. Rubin, "Estimating the Effect of Different Arsenic Maximum Contaminant Levels on the Affordability of Water Service," prepared for the American Water Works Association. 2000.

Scott J. Rubin, "Affordability of Water Service," Critical Issues in Setting Regulatory Standards, National Rural Water Association, 2001, pp. 23-42.

Scott J. Rubin, "Criteria to Assess the Affordability of Water Service," White Paper, National Rural Water Association, 2001.

Scott J. Rubin, Issues Relating to the Affordability and Sustainability of Rates for Water Service, presentation to the Water Utility Council of the American Water Works Association, New Orleans, LA. 2002.

Scott J. Rubin, Defining Affordability and Low-Income Household Tradeoffs, presentation to National Drinking Water Advisory Council Small Systems Affordability Working Group, Washington, DC. 2002.

Scott J. Rubin, Serving Low-Income Water Customers. Presentation at American Water Works Association Annual Conference, Orlando, FL. 2004.

Scott J. Rubin, Thinking Outside the Bill: Serving Low-Income Water Customers. Presentation at National League of Cities Annual Congress of Cities, Indianapolis, IN. 2004.

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Scott J. Rubin, Robert Raucher, and Megan Harrod, The Relationship Between Household Financial Distress and Health: Implications for Drinking Water Regulation, National Rural Water Association. 2007.

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John Cromwell III, et al., *Best Practices in Customer Payment Assistance Programs*, Water Research Foundation, Denver, CO. 2010.

Robert S. Raucher, et al., "Benefit-Cost Analysis for Drinking Water Standards: Efficiency, Equity, and Affordability Considerations in Small Communities," *Journal of Benefit-Cost Analysis*: Vol. 2: Issue 1, Article 4. 2011.

Stacey Isaac Berahzer, et al., *Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities*, American Water Works Association, et al. 2017.

Janet Clements, et al., *Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers*, Water Research Foundation, Denver, CO. 2017.

Mr. Rubin earned his law degree with honors from the National Law Center at George Washington University in Washington, DC, and his bachelor's degree with distinction in political science from Pennsylvania State University in University Park, PA. He lives in Bloomsburg, PA with his wife of 36 years.