

Best Practices in Customer Payment Assistance Programs

 Subject Area: Management and Customer Relations



Best Practices in Customer Payment Assistance Programs



About the Water Research Foundation

The Water Research Foundation (formerly Awwa Research Foundation or AwwaRF) is a member-supported, international, 501(c)3 nonprofit organization that sponsors research to enable water utilities, public health agencies, and other professionals to provide safe and affordable drinking water to consumers.

The Foundation's mission is to advance the science of water to improve the quality of life. To achieve this mission, the Foundation sponsors studies on all aspects of drinking water, including resources, treatment, distribution, and health effects. Funding for research is provided primarily by subscription payments from close to 1,000 water utilities, consulting firms, and manufacturers in North America and abroad. Additional funding comes from collaborative partnerships with other national and international organizations and the U.S. federal government, allowing for resources to be leveraged, expertise to be shared, and broad-based knowledge to be developed and disseminated.

From its headquarters in Denver, Colorado, the Foundation's staff directs and supports the efforts of more than 800 volunteers who serve on the board of trustees and various committees. These volunteers represent many facets of the water industry, and contribute their expertise to select and monitor research studies that benefit the entire drinking water community.

The results of research are disseminated through a number of channels, including reports, the Web site, Webcasts, conferences, and periodicals.

For its subscribers, the Foundation serves as a cooperative program in which water suppliers unite to pool their resources. By applying Foundation research findings, these water suppliers can save substantial costs and stay on the leading edge of drinking water science and technology. Since its inception, the Foundation has supplied the water community with more than \$460 million in applied research value.

More information about the Foundation and how to become a subscriber is available on the Web at www.WaterResearchFoundation.org.

Best Practices in Customer Payment Assistance Programs

Prepared by:

John E. Cromwell, III, Roger D. Colton, Scott J. Rubin, and Charles N. Herrick

Stratus Consulting Inc.

1920 L Street, NW, Suite 420, Washington, DC 20036

and

Jane Mobley, Kelly Reinhardt, and Rea Wilson

Jane Mobley Associates, Inc.

116 W 3rd St Suite 102, Kansas City, MO 64105

Jointly sponsored by:

Water Research Foundation

6666 West Quincy Avenue, Denver, CO 80235-3098

and

U. S. Environmental Protection Agency

Washington, D.C.

Published by:



DISCLAIMER

This study was jointly funded by the Water Research Foundation (Foundation) and the U.S. Environmental Protection Agency (USEPA) under Cooperative Agreement No. X-83294801. The Foundation and USEPA assume no responsibility for the content of the research study reported in this publication or for the opinions or statements of fact expressed in the report. The mention of trade names for commercial products does not represent or imply the approval or endorsement of the Foundation or USEPA. This report is presented solely for informational purposes.

Copyright © 2010
by Water Research Foundation

ALL RIGHTS RESERVED.
No part of this publication may be copied, reproduced
or otherwise utilized without permission.

ISBN 978-1-60573-092-9

Printed in the U.S.A.



Printed on recycled paper

CONTENTS

LIST OF TABLES	xi
LIST OF FIGURES	xiii
FOREWORD	xv
ACKNOWLEDGMENTS	xvii
EXECUTIVE SUMMARY	xix
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: PROCESS FRAMEWORK FOR CUSTOMER ASSISTANCE PROGRAMS	5
Defining Objectives	6
Core Processes: Strategies and Practices	7
Strategy 1: Shrink the Bills	7
Strategy 2: Shrink the Overdue Caseload and Arrearages	8
Strategy 3: Shrink the Cost of Collections	9
Support Processes	9
Performance Assessment and Continual Improvement	10
Upshot	11
CHAPTER 3: CURRENT PRACTICES IN CUSTOMER ASSISTANCE PROGRAMS	13
AWWA 2004 Survey of Utility Practices	13
Web Page Profile of 2008 Utility Practices	19
CHAPTER 4: PRIOR STUDIES OF CUSTOMER ASSISTANCE PROGRAMS	21
Water Affordability and Alternatives to Service Disconnection	21
Water Affordability Programs	21
Water Utility Options for Low-Income Assistance Programs	21
Thinking Outside the Bill	22
Affordability of Wastewater Service	22
Committee for Melbourne Debt Spiral Project	22
CHAPTER 5: OBJECTIVES: SIGNIFICANCE OF CUSTOMER PAYMENT ASSISTANCE	25
Implications for Customer and Stakeholder Relations	25
Implications for Public Health	27
Implications for Sustainability	29

CHAPTER 6: OBJECTIVES: TARGETING ASSISTANCE PROGRAMS FOR PAYMENT- TROUBLED CUSTOMERS	33
Understanding the Causes of Nonpayment.....	34
Targeting the Causes of Nonpayment.....	36
Targeted Objectives for Customer Assistance Programs.....	39
CHAPTER 7: SHRINK THE BILLS: CONSERVATION	41
CHAPTER 8: SHRINK THE BILLS: BILLING PRACTICES.....	45
CHAPTER 9: SHRINK THE BILLS: BILL DISCOUNTS	49
CHAPTER 10: SHRINK THE BILLS: ALTERNATIVE RATE STRUCTURES.....	53
Fixed Charge, Minimum Bill, or Minimum Usage Allowance	54
Lifeline Rates	55
Conservation Pricing.....	56
Water Budgets.....	56
CHAPTER 11: SHRINK THE OVERDUE CASELOAD AND ARREARAGES: PREVENTION BEFORE-THE-FACT	59
The Earned Income Tax Credit.....	59
The Federal Food Stamp Program	60
Federal School Nutrition Programs	60
The Low Income Home Energy Assistance Program.....	61
CHAPTER 12: SHRINK THE OVERDUE CASELOAD AND ARREARAGES: INTERVENTION AFTER-THE-FACT.....	63
Targeted Interventions	63
Effective vs. Ineffective Interventions.....	65
Late Fees and Credit Scoring.....	65
Outbound Reminders	65
Shutoff Notices	66
Ease of Payment.....	67
CHAPTER 13: SHRINK THE OVERDUE CASELOAD AND ARREARAGES: CRISIS ASSISTANCE PROGRAMS	69
Fundraising for Crisis Assistance	69
Customer Contribution Options.....	70
Fund Distribution Options	71
The Administering Body.....	71
The Benefit Payment Trigger.....	71
CHAPTER 14: SHRINK THE OVERDUE CASELOAD AND ARREARAGES: DEFERRED PAYMENT PLANS.....	73
Down Payment Decisions.....	73
Monthly Payment Decisions	74

The Multiple Aspects of Ability to Pay	75
Second Payment Plans	76
Incentives and Penalties With Payment Plans	77
Arrearage Forgiveness	78
The Prerequisite to Earning Credits	78
Customer Copayments	79
The Forgiveness Period.....	79
Deposits as an Asset Rather Than an Obligation.....	80
Avoiding the Unjustified Deposit	81
Avoiding the Excessive Deposit.....	82
CHAPTER 15: SHRINK THE OVERDUE CASELOAD AND ARREARAGES: PROGRAMS TO MINIMIZE RECURRENCES.....	85
CHAPTER 16: SHRINK THE COST OF COLLECTIONS.....	87
Minimizing the Overdue Caseload and Arrearages	88
Minimizing the Cost of Caseload Processing	89
Minimizing Repeat Occurrences of Nonpayment.....	90
Accounting for Costs and Benefits	91
CHAPTER 17: SUPPORT PROCESSES: LEGAL SUPPORT	93
Lifeline Rates and Other Discount Programs	93
Service Regulations and Ability to Pay	94
Targeted Conservation Programs and Other Special Programs.....	95
Customer Privacy.....	95
Debt Collection Requirements	96
The Relevance of State Utility Commission Regulations in an “Unregulated” Environment.....	96
State Laws Authorizing Alternative Rates, Discounts, Or Low-Income Assistance.....	97
California Public Utility Code § 739.8—Low-Income Water Ratepayers	97
Massachusetts General Law Chapter 23B § 24B—Low-Income Sewer and Water Assistance Program.....	97
New Mexico Low Income Water, Sewer and Solid Waste Service Assistance Act, New Mexico Statutes Annotated §§ 27-6A-1 to 27-6A-5	98
Texas Special District Local Laws Code § 7201.206—Rates and Fees for Services	99
Washington Revised Code § 36.94.370—Waiver or Delay of Collection of Tap-in Charges, Connection, or Hookup Fees for Low-Income Persons....	99
Washington Revised Code § 57.08.014—Authority to Adjust or Delay Rates or Charges for Low-Income Persons—Notice.....	99
CHAPTER 18: SUPPORT PROCESSES: PERSONNEL TRAINING	101

CHAPTER 19: SUPPORT PROCESSES: INFORMATION TECHNOLOGY	105
Characterizing Payment-Troubled Customers	105
Maintaining and Using Account History Information	106
Performance Measurement and Continuous Improvement.....	107
 CHAPTER 20: SUPPORT PROCESSES: COMMUNICATIONS STRATEGY FOR CUSTOMER ASSISTANCE PROGRAMS	 109
Objectives	110
Audience Analysis	110
Identify Barriers to Communications.....	112
Identify Appropriate Channels of Communication.....	113
Develop Appropriate Messages and Materials	115
Measure Performance and Continually Improve	116
 CHAPTER 21: SUPPORT PROCESSES: COMMUNICATING WITH VULNERABLE AND HARD TO REACH POPULATIONS	 119
Economically Disadvantaged.....	121
Communication Barriers.....	121
Overcoming Communication Barriers	122
Limited Language Proficiency.....	122
Communication Barriers.....	123
Overcoming Communication Barriers	124
Elderly.....	125
Communication Barriers.....	125
Overcoming Communication Barriers	125
Disability.....	126
Communication Barriers.....	126
Overcoming Communication Barriers	127
Engaging Other Audiences	128
Examples.....	129
Blanket Approach	129
Language Barriers.....	130
Keeping It Simple	130
Community Collaboration in Assistance Programs.....	130
Awareness of Programs and Eligibility	131
Promoting Other Assistance Programs	131
Coalitions	132
Community Outreach.....	132
 CHAPTER 22: PERFORMANCE MEASUREMENT AND CONTINUOUS IMPROVEMENT	 135
Continuous Improvement.....	136
Performance Measurement	137
Advanced Practices.....	140
Termination of Service	141
Payment Agreements	141

Money at Risk	141
Customers in Arrears	142
Weighted Arrears	142
Need for Each Component.....	142
Calculation of Final Score	143
CHAPTER 23: CUSTOMER PAYMENT ASSISTANCE IN SMALL SYSTEMS	145
Objectives	145
Strategy 1—Shrink the Bills	146
Strategy 2—Shrink the Overdue Caseload and Arrearages.....	147
Strategy 3—Shrink the Cost of Collections.....	147
Support Services	147
Performance Measurement and Continuous Improvement.....	148
CHAPTER 24: CONCLUSIONS AND RECOMMENDATIONS.....	149
Conclusions.....	149
Recommendations for Utilities	150
Research Recommendations	151
REFERENCES	155
ABBREVIATIONS	159

TABLES

3.1	About how many residential accounts does your water utility serve and bill?.....	14
3.2	What is the average annual bill for water service for a residential customer?	14
3.3	What is your utility’s typical percentage of unpaid residential water bills?.....	14
3.4	On a scale of 1 to 7 (where 1 means “strongly disagree” and 7 means “strongly agree”), please rate how much you agree or disagree with the following statement:	15
3.5	On a scale of 1 to 7 (where 1 means “strongly disagree” and 7 means “strongly agree”), please rate how much you agree or disagree with the following statement:	15
3.6	Options facing payment-troubled customers	16
3.7	How is eligibility determined for your financial assistance program(s)?	16
3.8	Reasons why utility does not have an assistance program	17
3.9	What is the total annual cost to your utility for all assistance programs?.....	17
3.10	Sources of funding for utility assistance programs.....	18
3.11	On a scale of 1 to 7, please rate how well you think your existing assistance program(s) address current needs (1 = not well, and 7 = very well)	18
6.1	Mapping causes of nonpayment to elements of assistance programs.....	38
19.1	Profile of payment-troubled accounts vs. community data	106
19.2	Multiple attribute profile of payment-troubled accounts	107
22.1	Process maturity scoring matrix.....	137

FIGURES

ES.1	Figure ES.1. Business process model of customer payment assistance program.....	xx
2.1	Business process model of customer payment assistance program	5
5.1	Range of water utilities' level of uncollectible residential bills, 2004	26
5.2	Number of customers paying directly for water and wastewater service, by annual household income in 1999	26
5.3	Percent of US population that experienced hardship in 1995.....	27
5.4	Change in water and wastewater costs compared to change in general inflation, 1990–2006 (indexed to 1990 = 100).....	30
5.5	Change in water and wastewater costs compared to change in MHI, 1990–2006	30
5.6	Comparison of median and first quintile (lowest 20%) of household incomes in constant 2007 dollars, 1990–2007	31
6.1	Financial hardship resulting from trade-offs between essential needs	35
13.1	Continuum of customer discretion in crisis fund payments.....	69
16.1	Identifying likelihood of self-cure by dollar amount and age of arrears	89
22.1	Business process model of customer payment assistance program	135
22.2	Continuous improvement goals	138

FOREWORD

The Water Research Foundation (Foundation) is a nonprofit corporation that is dedicated to the implementation of a research effort to help utilities respond to regulatory requirements and traditional high-priority concerns of the industry. The research agenda is developed through a process of consultation with subscribers and drinking water professionals. Under the umbrella of a Strategic Research Plan, the Research Advisory Council prioritizes the suggested projects based upon current and future needs, applicability, and past work; the recommendations are forwarded to the Board of Trustees for final selection. The Foundation also sponsors research projects through the unsolicited proposal process; the Collaborative Research, Research Applications, and Tailored Collaboration programs; and various joint research efforts with organizations such as the US Environmental Protection Agency, the US Bureau of Reclamation, and the Association of California Water Agencies.

This publication is a result of one of these sponsored studies, and it is hoped that its findings will be applied in communities throughout the world. The following report serves not only as a means of communicating the results of the water industry's centralized research program but also as a tool to enlist the further support of the nonmember utilities and individuals.

Projects are managed closely from their inception to the final report by the Foundation's staff and large cadre of volunteers who willingly contribute their time and expertise. The Foundation serves a planning and management function and awards contracts to other institutions such as water utilities, universities, and engineering firms. The funding for this research effort comes primarily from the Subscription Program, through which water utilities subscribe to the research program and make an annual payment proportionate to the volume of water they deliver and consultants and manufacturers subscribe based on their annual billings. The program offers a cost-effective and fair method for funding research in the public interest.

A broad spectrum of water supply issues is addressed by the Foundation's research agenda: resources, treatment and operations, distribution and storage, water quality and analysis, toxicology, economics, and management. The ultimate purpose of the coordinated effort is to assist water suppliers to provide the highest possible quality of water economically and reliably. The true benefits are realized when the results are implemented at the utility level. The Foundation's Trustees are pleased to offer this publication as a contribution toward that end.

David E. Rager
Chair, Board of Trustees
Water Research Foundation

Robert C. Renner, P.E.
Executive Director
Water Research Foundation

ACKNOWLEDGMENTS

Funding for the project was provided by the Water Research Foundation under Project #4004. The project was also supported by the following participating utilities: City of Akron, Ohio, Public Utilities Bureau; City of Portland, Ore., Bureau of Water Works; and the Salt Lake City Corporation, Utah, Department of Public Utilities. The Rural Community Assistance Partnership also supported the project in sponsoring a special seminar relating to the needs of small community utility systems. Thanks especially to Dr. Joy Barrett for also reviewing the draft report.

The project team wishes to thank the Foundation's project manager, Susan Turnquist, for her support throughout the project. The Foundation's project advisory committee provided technical review of project outputs and shared their insights to help shape the product to be more effective for the intended audiences. Many thanks to George Ellenwood of the Detroit Water and Sewerage Department, Alexander McPhail, PhD, of the World Bank, and Elisa Speranza of CH2M Hill for their helpful guidance.

Stratus Consulting assembled a team of specialists to assist in the project who have contributed significant substance to the course of the research and the project report. We extend our thanks to Jane Mobley, Kelly Reinhardt, Rea Wilson, Scott Rubin, and Roger Colton.

Thank you all very much.

John Cromwell
Principal Investigator
Stratus Consulting Inc.
Washington, DC

Charles Herrick, PhD
Executive Vice President
Stratus Consulting Inc.
Washington, DC

EXECUTIVE SUMMARY

OBJECTIVES

The purpose of this project was to perform a review of best practices in utility programs to assist payment-troubled customers and assemble the results into a reference guide for use by utility management teams in developing and improving such programs. The project entailed review of prior industry survey results on this topic, review of industry research and literature, consultations with utilities and other organizations involved in providing assistance to low-income and other difficult-to-reach populations, consideration of commercial collections practices, examination of practices employed by electric and gas utilities, and examination of practices in Europe and Australia.

BACKGROUND

Water supply is a rising cost industry. Given the inherently public and community nature of water service, utilities must be sensitive to their customers' needs with respect to affordability and bill paying. Utilities can apprise themselves of best practices that are responsive to these needs and develop an approach that is right for the community they serve. Indeed, many leading water systems have already implemented a wide array of customized local remedies. The summary of best practices provided herein is organized to promote the adoption of a business process approach to helping payment-troubled customers. By regarding this function as a deliberate process, a utility can become more mindful of the community objectives being served and more attentive to delivering and continually improving a high level of service in this area of the business. Developing a rigorous approach to customer payment support and management is not just the right thing to do, it makes good business sense and strengthens the utility organization in a variety of ways.

APPROACH

Defining a business process model, illustrated graphically in [Figure ES.1](#), provides a structured means of designing and continually improving a business function, beginning with a thorough articulation of the objectives to be achieved by the process. The next step is to define specific strategies through which combinations of work practices are believed to be capable of producing outcomes that will satisfy the overall process objectives. Such strategies may be viewed as hypotheses that can be tested using performance measures to determine how well they are working. Over time, these strategic hypotheses about the best practices that produce the desired outcomes can be refined to assure the continual improvement of performance.

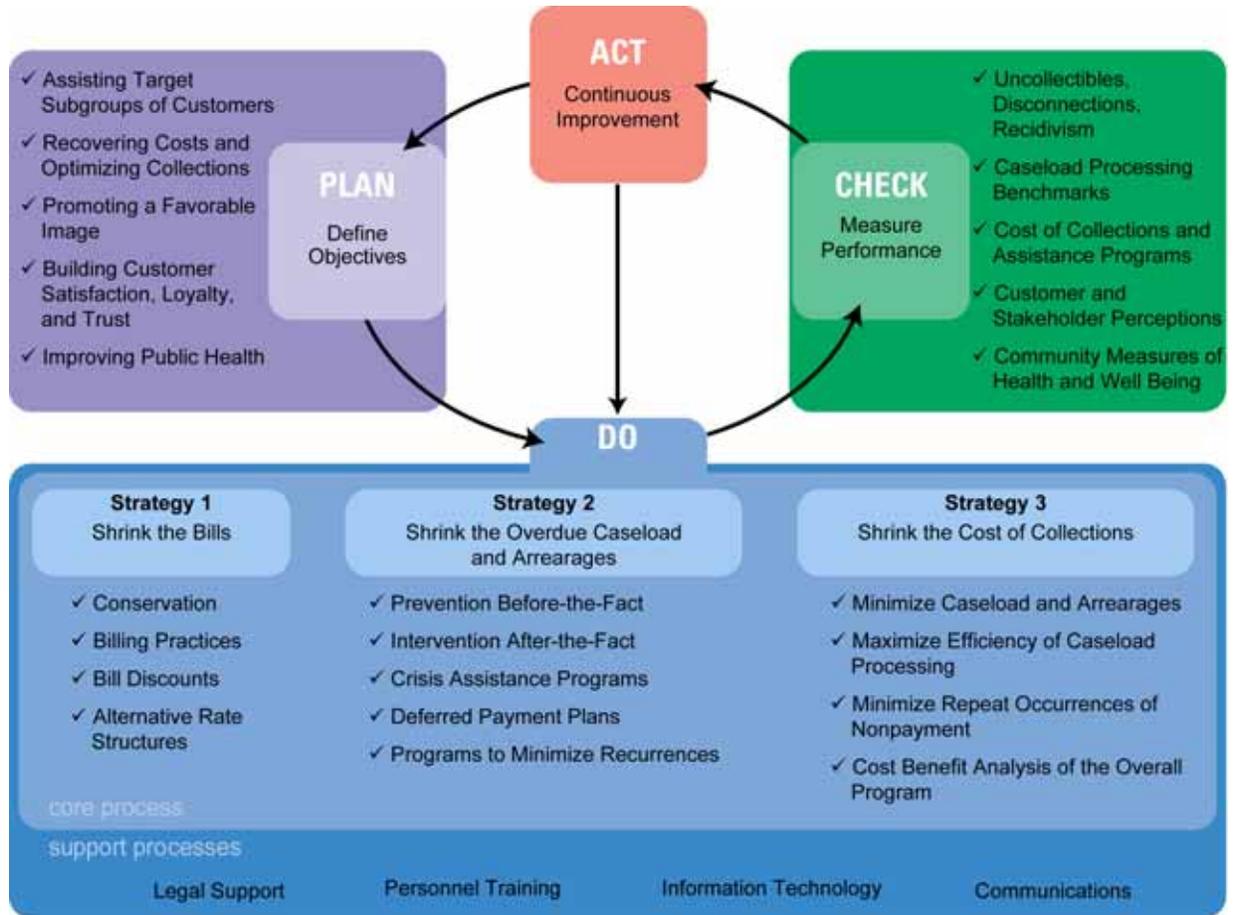


Figure ES.1. Business process model of customer payment assistance program

The field of customer payment assistance contains extensive examples of practices that are being employed as well as examples of how organizations have assembled combinations of practices to develop an overall program. However, the pathway that many have followed in assembling these programs has been somewhat ad hoc in many cases, and has most often not been designed from the start with the intention of deploying an integrated, deliberate business process to achieve specific objectives. This absence of structure coupled with the large number and diversity of individual practices that have been devised contributes to the impression of this field as a dense forest with many trees among which to wander. In devising this reference guide, the business process model illustrated in [Figure ES.1](#) is used as an organizing framework for discussing both the forest and individual trees. The overall process approach helps promote more systematic program development and continual improvement. The individual practices are grouped together in logical clusters and discussed individually, as well as in relation to their role in the overall process.

RESULTS/CONCLUSIONS

A central finding of this research is that while most water utilities can say that they take steps to help payment-troubled customers, their programs of activity are usually ad hoc

collections of practices, not well integrated with the utility’s mission or other management practices, and operated without clearly articulated objectives. Customer payment assistance programs have sometimes arisen out of the politics of the moment, following bad economic times when disconnections have risen to levels drawing negative attention. Yet, this can lead to a sense of complacency that something is being done about the problem, suppressing the initiative to try to do better. This was confirmed in a survey conducted by the American Water Works Association (AWWA) in 2004. Two-thirds of respondents reported their level of uncollectibles was below 1% and was not considered to be a big problem. Economic conditions have changed drastically since the AWWA survey was conducted in 2004. Comprehensive utility programs that reflect the deliberate intention and follow-through of a business process are likely to function better than ad hoc programs in both good and bad economic conditions. It is not enough to say, “We have a customer assistance program.” Water utilities should aspire to be able to say, “We have a customer assistance program that reflects the standard of best practice in the industry and we are continually improving it.”

APPLICATIONS/RECOMMENDATIONS

One of the beneficial outcomes of applying a formalized business process is the almost immediate identification of “low-hanging fruit.” There are always a number of gaps that are revealed by the initial application of a comprehensive and systematic framework that can lead to early successes and quick program improvements. There are also longer-term benefits from the simple disciplines of defining the objectives of a business process and undertaking deliberate efforts to measure the performance of the process in meeting the objectives.

Implications for Customer Relations and Community Image

Consideration of the objectives of customer payment assistance programs yields a number of significant observations for water utilities. Whereas a 1% level of uncollectibles implies a small problem, statistics show that nationally about 15% of residential water customers are low-income households that are constantly at risk of payment problems. This proportion can obviously be much larger in some jurisdictions, and costs have been continually rising faster than inflation. So, although only 1% may be in arrears at any given time, a much larger proportion of the customer base may come into contact with a utility’s collections process over the course of time. Word of mouth will also expand awareness of the utility’s reputation in this area of performance. While it may not seem like it, this area of business practice may have a great bearing on a utility’s ability to build and sustain customer loyalty, satisfaction, and trust over the long haul. Business research has shown that customers have long memories about their positive and negative experiences with customer service.

A Business Case for Customer Assistance Programs

An important question is whether the utility should be striving to simply resolve instances of nonpayment, or trying to help solve the endemic problem of nonpayment by incorporation of strategies and practices that address, or are sensitive to, underlying causes of nonpayment. While utilities are not in the social services business, a proactive approach is ultimately a more effective business strategy than simply waiting for accounts to appear as past due. One of the greatest

challenges in providing social services is simply identifying and reaching families in need. The most obvious strategy is to integrate the utility's activities more closely with those of the actual social service providers in the community.

Other solution-oriented strategies available to utilities involve provision of direct assistance to customers in various forms (crisis assistance, bill discounts, debt forgiveness, etc.) constituting a cross-subsidy, where one group of customers bears costs on behalf of another. Such deliberate cross-subsidies are illegal in many jurisdictions and forbidden by utility policies in others. However, in the standard commercial approach to collections, much collections effort is wasted and costs of excessive disconnections, reconnections, and write-offs are incurred with no means of recovery except through the very same mechanism of cross-subsidy by full-paying customers.

Another critical factor in the success of a customer assistance program is recognition that there are various causes of nonpayment at the household level, including job loss, illness, disability, domestic turmoil, and unexpected expenses that upset fragile budgets in low-income households. Given that the causes are different, it follows that a utility collections program that treats all cases following the same protocol is going to be less effective than a program that recognizes that one size will not fit all circumstances. The best practice is to develop custom approaches for specific target subgroups of customers with recurring patterns of payment problems. Commercial approaches to collections make no distinction between delinquent accounts. A one-size-fits-all approach drives all accounts that either can't pay or won't pay toward termination. If a collections strategy instead recognizes that many simply can't pay when due, there are numerous options for recovering substantial revenue with fewer terminations, producing superior business outcomes for the utility.

The Public Health Case for Customer Assistance Programs

A final consideration of importance to water utilities is the relationship of payment problems to health issues. Poverty researchers have documented that utility bills compete with other necessities such as food and medical care in the household budgets of low-income families. Potential impacts relate to many of the same public health endpoints targeted by Safe Drinking Water Act standards such as effects on children and the unborn. Utilities must acknowledge this connection between affordability and public health as another compelling reason to go beyond normal commercial collections practices and help meet higher community goals in this area of service.

RESEARCH PARTNER

U.S. Environmental Protection Agency

PARTICIPANTS

- City of Akron, Ohio, Public Utilities Bureau
- City of Portland, Ore., Bureau of Water Works
- Salt Lake City Corporation, Utah, Department of Public Utilities
- Rural Community Assistance Partnership

CHAPTER 1

INTRODUCTION

Water, energy, and telecommunication utilities are using a number of approaches to establish and operate “customer assistance programs.” We define “customer assistance programs” as organized efforts to help payment-troubled customers. There is an array of possible practices that can be applied to help customers who are having trouble paying their water utility bills. There are several implementation options within each area covered by these practices. The breadth and depth of customer assistance programs has grown out of the natural diversity of local utility programs. They have been devised to meet local circumstances, drawing upon local resources, and working within legal, financial, and practical constraints in each community.

In fact, the breadth and depth of the choices may present a challenge even to established practitioners. Many have begun programs on an ad hoc and incremental basis—adopting individual practices here and there in response to the pressures of the moment. These collections of practices can be distributed across different departments within the utility organization, presenting challenges to coordination. While some utilities have launched programs as deliberate strategic initiatives, implementation is often limited to initial rollout and routine operations. Complacency can set in without a mechanism for continual improvement and advancement of best practice.

The missing piece is a straightforward application of the principles of Total Quality Management in order to optimize programs by identifying and enhancing the best combination of practices for a particular utility. The first step is to acknowledge that a customer payment assistance program is a distinct *business process*. A business process framework has several essential characteristics:

- Objectives—A clear statement of what the process is intended to accomplish in terms of practical outcomes and strategic goals both for customers and for the business organization.
- Strategies and Practices—A clearly articulated strategy comprised of a deliberate combination of practices that are to be carried out in order to meet the stated objectives.
- Implementation—Specific methods for implementing each individual practice including cross-cutting support processes such as from information systems and training.
- Performance Measurement—Specific measures to assess the effectiveness of the strategies, practices, and implementation methods.
- Continuous Improvement—Regular revisiting of the above, as part of a “Plan-Do-Check-Act” cycle, to ensure continuous improvement and advancement of practices.

This report applies a business process framework to address the problem of customer nonpayment. The framework is devised as a means of reviewing both the breadth and depth of the subject. The report is organized to follow the flow of the process framework, providing a comprehensive structure as well as examining each piece in detail. The intention is to provide a reference that can serve almost as a textbook reviewing the scope of possible approaches in each individual area. This includes ideas from outside the water and wastewater industry—especially drawing on the energy utility sector. At the same time, the process framework provides a means of “rolling up” all the strategies and practices being implemented by a utility and summarizing

them in a manner that enables a “gap analysis” to identify missing or under-developed program elements. The report is designed in this manner to help utilities design and carry out customer assistance programs. It is not a report to read straight through from cover-to-cover. As described below, Chapters 2 through 6 establish an overall framework for program development. The framework explains how the diverse elements of a comprehensive program can best fit together to meet stated goals. The remaining chapters focus on the details of individual practices that can be used to build and improve a program.

Chapter 2 provides an overall description of the process framework, explaining how to think about customer assistance programs as a business process. In a nutshell, the major finding and recommendation of this research is that the strategies and practices required to develop and implement customer payment assistance programs are well established and well within the grasp of utilities. However, there is a significant need for a more systematic approach to applying these practices in order to optimize program outcomes for both customers and utilities.

Chapter 3 presents survey results characterizing the current state of practice in the water and wastewater industry. Viewed through the lens of the process framework, it is possible to see where the gaps are across the industry as a whole. The biggest gap is the lack of a systematic approach in most places.

Chapter 4 reviews published sources on the subject of customer payment assistance programs in the water and wastewater utility field. The process framework is used to characterize which parts of the problem each source covers. There are several excellent publications that are very accessible to water and wastewater utilities. These are identified as recommended reading.

Chapters 5 and 6 take up the first key step in the execution of a business process approach to customer assistance programs: defining the objectives. At the most general level, it is essential to develop a clear vision of why helping payment-troubled customers is important. This must be communicated to internal and external audiences to ensure a shared understanding. Chapter 5 explores the significance of payment problems. It reviews data on the rising cost of utility services; the day-to-day plight of less fortunate portions of the population who face payment difficulties; and the hard consequences of unpaid bills and shut-offs.

Whereas Chapter 5 reviews the most general perceptions, realities, and philosophies that guide the development of program objectives, Chapter 6 turns to the practical side. It is essential to also define program objectives in terms of very specific targeting of sub-populations within the payment-troubled segment of the customer base. Not all payment troubles are alike and specific combinations of program elements are effective for specific sub-populations. Hence, there is a need for careful targeting. As the process framework will demonstrate in later chapters, there is a wide array of possible strategies and practices to choose among. If these are selected with the deliberate intent of improving outcomes for specific target groups, this provides an explicit basis for performance measurement and continual improvement. If, as too often is the case, a utility selects a collection of program elements without also stating their specific objectives, it is more difficult to assess progress and improve outcomes.

The actual strategies and practices that can be applied in the implementation of a customer assistance program are categorized in terms of three sequential program elements, as follows:

- Shrink the bills
- Shrink the overdue caseload and arrearages
- Shrink the cost of collections

Shrinking the size of the bills is an obvious first choice in improving affordability. There are several time-tested approaches, including:

- Conservation education and assistance
- Alternative billing practices
- Bill discounts
- Alternative rate structures

These are described and discussed in Chapters 7, 8, 9, and 10, respectively. Each practice is described, assessed in terms of relevance to specific target groups or broader objectives, and discussed in terms of implementation methods and approaches.

Shrinking the overdue caseload and arrearages involves a sequence of steps that are available for coping with late-paying and nonpaying accounts. However, many utilities are not engaging all the steps in the sequence, or not taking advantage of their combined potential. The practices comprising the sequence include:

- Prevention before-the-fact
- Intervention after-the-fact
- Crisis assistance programs
- Deferred payment plans
- Programs to minimize recurrences

These are described and discussed in Chapters 11, 12, 13, 14, and 15, respectively. Each practice is described, assessed in terms of relevance to specific target groups or broader objectives, and discussed in terms of implementation methods and approaches.

Shrinking the cost of collections is another essential program element, and is the topic of Chapter 16. It is not as straightforward as it sounds, however, because the total program costs (beyond just collections) and benefits must be examined instead of focusing too narrowly on just collections costs.

The application of a business process framework also makes it clear that the core functions directly addressing the payment problem must be leveraged with appropriate support processes in several cross-cutting areas, including:

- Legal support
- Personnel training
- Information technology (IT)
- Communications

Chapter 17 reviews a range of legal questions that arise across the array of practices that are involved in a comprehensive program. Legal constraints are a critical feature in program design and should be an early consideration. Constraints can sometimes be removed if a strong case can be put forward effectively.

The people responsible for directly helping other people to cope with payment problems are a critical factor in success. The level of understanding of program objectives as well as the training and sensitivity required to be effective are paramount. Utilities have many ways of meeting these needs. These are discussed in Chapter 18.

The best customer assistance programs are ones that offer a complete approach to the problem. But, as the process framework makes clear, such comprehensiveness requires sophisticated targeting, a broad array of practices, and a number of people from across the utility. Efficient use of information resources is therefore a very valuable source of leverage. Much of what is needed exists or is within reach. But meeting the information support requirements of this business process requires a deliberate effort—the same as for any other process in the utility. Chapter 19 describes the general types of requirements that could arise in program planning and implementation.

Another essential cross-cutting support process is communications. From the very start, the careful targeting of a customer assistance program defines audiences that have to be reached and the effectiveness of that communication will be critical to success. At every step, as specific practices are selected, they each have unique characteristics in terms of the specific sub-populations they are targeting and the character of the communications that will be required to implement them. Chapter 20 offers a generic outline for developing a communications strategy in support of utility customer assistance programs. Chapter 21 presents a useful summary of background research on the topic of communicating with isolated or difficult-to-reach sub-populations.

Chapter 22 draws upon a considerable body of experience in performance measurement and continual improvement which holds great promise for the field of customer payment assistance. Suggested measurement approaches are recommended. A process maturity analysis methodology is also presented as an additional tool for promoting continual improvement.

Chapter 23 offers a translation of all of the above for use by small systems. The development and implementation of customer assistance programs has been led by large utilities and some parts of the report focus on leveraging these programs in the large utility context. However, the principles being applied are quite universal. And, in many instances, some ideas may be simpler to apply at very small scale due to the lack of a need for broad coordination and integration across a large organization.

Although many strategies and practices described in this report have been developed and demonstrated, there is another important group of issues that remains much less developed in the current state-of-the-art of customer payment assistance programs. The problem of nonpaying landlords and the associated issues of tenant rights is truly an entirely different issue that requires an entirely separate analysis of best business practices available to utilities. In terms of the impact of water bills on low-income populations, it is about of equal scale since about half of this target group pay a water bill and the other half do not. Utilities have substantial experience in dealing with wayward landlords and protecting tenant rights. Their experience in coping with these issues has evolved in very unique ways in different jurisdictions as a product of varying local housing policies. That experience also could be harvested and developed into another report to guide utility best practices, but the present report addresses solely the problem of assisting individual households facing nonpayment issues.

Chapter 24 presents the summary findings and recommendations for future research.

CHAPTER 2

PROCESS FRAMEWORK FOR CUSTOMER ASSISTANCE PROGRAMS

The field of customer payment assistance contains extensive examples of specific practices that are being employed as well as examples of how different organizations have assembled combinations of practices to comprise an overall program. However, the pathway that many have followed in assembling these programs has been more a matter of incremental decisions in response to the pressures of the moment. Most often programs have not been designed from the start with the intention of deploying an integrated, deliberate business process to achieve specific objectives. This absence of structure, coupled with the large number and diversity of individual practices, can make a very confusing and overwhelming area of utility management.

Defining a business process model, illustrated graphically in [Figure 2.1](#), provides a structured means of designing and continually improving a business function, beginning with a thorough articulation of the objectives to be achieved by the process. The next step is to define a strategy through which a specific combination of work practices are believed to be capable of producing outcomes that will satisfy the overall process objectives. Such a strategy may be viewed as a hypothesis that can be tested using performance measures to determine how well it is working by measuring targeted outcomes such as reductions in the level of arrearages and the number of accounts in arrears. Over time, the strategic hypotheses about the best practices to produce these desired outcomes can be continually refined to ensure the continual improvement of performance.

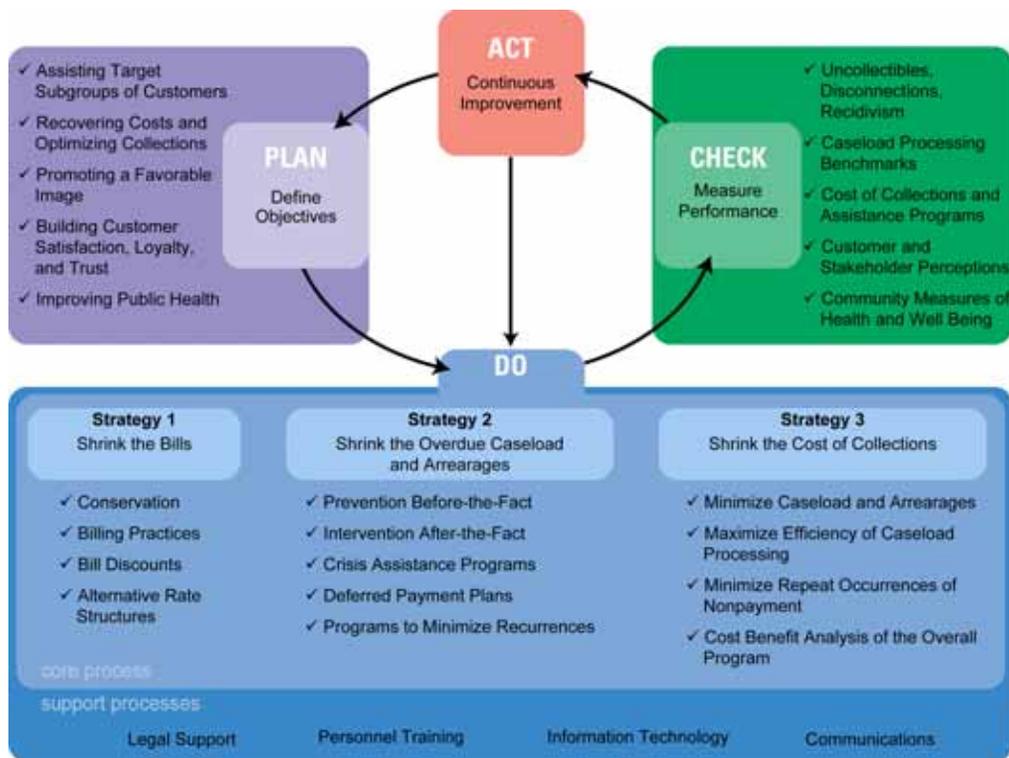


Figure 2.1 Business process model of customer payment assistance program

DEFINING OBJECTIVES

Defining an overall business process forces a concentrated focus on objectives. In contrast, when an ad hoc collection of practices is being implemented without formal recognition of the intent of the overall process, the sense of purpose can get lost. It can then become very difficult to assess how the overall effort is performing or to identify needs and methods for improving performance. In addition, having a clearly articulated sense of purpose is essential to the coordination and integration of practices across several utility departments.

At the outset, many utilities may approach the development of customer payment assistance programs with some reluctance, viewing it as something outside their area of technical expertise and tangential to their core mission of delivering utility services. But, cost recovery and the cost of collections are essential business objectives. And, in the political environment in which monopoly businesses operate, it cannot be forgotten that shut-offs can be expensive, harmful to public health, and contribute to a negative image. Thus, maintaining the integrity of revenues through good business practices and maintaining a favorable image in the community are significant objectives that must be approached in harmony.

At a household level, there are some people in need of assistance who face potentially significant adverse consequences if their water is shut off. But, one of the greatest challenges facing utilities is that those truly in need comprise only a subset of the total accounts overdue at any point in time. Many past due accounts will “self-cure.” Others will be resolved short of shut-off as a result of “interventions” applied during the collections process such as late notices or reminder phone calls. Some late-payers may be gaming the system and seem poor candidates for any type of actual assistance; yet there is a worthy subset that is truly having difficulty paying and for whom the consequences are dire.

It takes a noble effort for a utility to dive into this morass and undertake to sort it out to get to those truly in need and help them. The rewards are great, however. When the right help reaches the right people, adverse social consequences can be avoided. These include avoided impacts on public health that, in fact, relate to the utility’s core mission. In addition, customers tend to have long memories regarding their experiences with customer service departments and good news travels. Over the long-term, a utility can do much to build customer satisfaction, loyalty, and trust by performing well in this area.

Beyond recognizing and embracing the broad organizational and societal significance of assistance programs, it is also necessary to establish much more specifically targeted objectives for a customer assistance program. Available data resources can be used to characterize payment-troubled customers. This characterization can be used as a basis for defining very specific program objectives to address the needs of target groups. Customizing target-specific program strategies, tactics, and performance metrics are keys to success. Demographic information available from the United States (US) Census and local sources can be used to characterize the customer base in terms of the low-income population, the elderly population, people with disabilities, and people with limited language proficiency. With appropriate privacy protections, data from local social service agencies and the utility’s own customer billing system can be used to identify and characterize households that are known to be struggling with payment issues.

CORE PROCESSES: STRATEGIES AND PRACTICES

A business process framework provides a structured way of thinking about both the forest and the trees (strategies and tactics) while keeping an eye on overall objectives. We define a customer assistance program in terms of three core elements of strategy:

- Shrink the bills
- Shrink the overdue caseload and arrearages
- Shrink the cost of collections

Once these major elements of a strategy are defined, it is possible to readily classify the specific work practices as fitting within one of the elements. Each of these major elements of strategy and their related practices are discussed briefly below.

Strategy 1: Shrink the Bills

For whatever reason, or combination of reasons, that a customer encounters difficulty in paying a water bill, that difficulty is always lessened if the bill is reduced. With each marginal reduction in the size of the average water bill, the number of overdue bills in the utility's caseload will also be scaled back. And, when reductions in water bills can be achieved through certain types of measures (e.g., conservation fixtures, rate structures, customer financial management counseling), the reduction in the number and size of overdue accounts can be significant and long-lasting. Within this element of strategy, four major types of practices are identified as means of shrinking customers' bills:

- Education and assistance in conservation
- Alternative billing practices
- Low-income discounts
- Rate structure alternatives

Reducing consumption through conservation is often a first strategy to try. It has the merit of affecting the consumption side of the revenue equation which is more important in some utilities where there is no flexibility on the price side of the equation. When legal and policy settings allow for also varying the price to benefit low-income consumers, there is a menu of practices for accomplishing this through shifts in the utility's rate structure without targeting specific customers (e.g., lifeline rates). There are also more explicitly targeted practices such as low-income discounts which entail the establishment and administration of eligibility criteria to enroll targeted customers.

Sometimes variation in the size of a water bill can be offset by the method and timing of billing. The cost of peak season usage that would hit hard during certain months may be better spread over the whole year through a leveled billing approach. Alternatively, a switch from quarterly to monthly billing intervals can ease the pain of seasonal swings by making the bills smaller and the change more gradual. Billing practices may also be modified to take account of seasonal swings in employment, income, and energy costs.

Strategy 2: Shrink the Overdue Caseload and Arrearages

The second major element of strategy in a customer payment assistance program is to shrink the caseload of overdue accounts and associated arrearages. The following types of practices can be applied in support of this strategy:

- Prevention before-the-fact
- Intervention after-the-fact
- Crisis assistance programs
- Deferred payment plans
- Programs to minimize recurrences

Once accounts appear as overdue, practices deployed under this strategy are intended to address the problem quickly before large arrearages begin to mount and to deal with arrearages expeditiously, so they can be resolved in the most efficient way. However, the best practice in meeting these strategic objectives begins before-the-fact. It is possible to prevent some proportion of overdue accounts through customer awareness of assistance programs. One utility reported, for example, that just making people aware of a school lunch program made a noticeable difference in their level of unpaid accounts. As another example, encouraging people to call beforehand if they are going to miss a payment can help to get them into a payment plan, or other resolution, sooner than waiting for the late date to arrive.

After-the-fact, there is an entire school of thought, and associated practices, focused on swift intervention in order to arrest the problem before large arrearages begin to mount. Some believe that a firm collections policy backed by late fees and the threat of disconnection is the most effective means of clearing the caseload in the most efficient manner. Firm pressure is believed necessary for many accounts that, if treated less firmly, would try to “game the system.” Variations on this theme include approaches that sustain swift and firm pressure, but also offer assistance practices in parallel that assess whether payment is practically achievable and divert suitable customers to alternative relief measures.

Connecting truly needy customers with internal and external sources of financial assistance is a priority practice in any program. Preventing abuse of assistance resources by people gaming the system is also important and presents a continual challenge to the practices for administering assistance. Crisis intervention practices are an essential part of a program in situations where disconnection looms and carries the threat of eviction.

Once nonpayment becomes a matter of fact, there is an array of practices to choose from in resolving the problem. There is a large menu of choices in the design of payment programs. Such programs may be tailored to an individual customer by a trained, sensitive case worker. Payment arrangements may or may not involve some level of arrearage forgiveness or penalty reduction as an incentive to settlement. Strings may be attached or billing arrangements may be customized as additional incentives to encourage an improved payment record and the reasonably rapid elimination of accumulated arrearages. Some utilities use a security deposit or require a guarantee in association with payment plans to try to assure compliance. Whatever payment plan practices are adopted, experience shows it is necessary to also have practices to deal with some repeat instances of nonpayment and renegotiation of payment plans.

Strategy 3: Shrink the Cost of Collections

A utility cannot afford to have so many practices within its customer payment assistance program that the cost of administering the program outweighs missing revenue. At a superficial level, it might look cheaper to write off arrearages, but that could lead to mounting abuse if the word gets out that bills do not have to be paid. So, it is necessary to have a strategy to conduct a continual assessment and reassessment of the best overall combination of collection practices for a utility. This search for the optimal approach can include:

- Minimizing the caseload and arrearages
- Maximizing the efficiency of caseload processing
- Minimizing repeat occurrences of nonpayment
- Cost-benefit analysis of the overall program

While many of the practices discussed above bear on minimizing the caseload and the level of arrearages, it is necessary to look across these practices as a group to assess whether the overall outcome achieved is optimal for the effort expended. Are some practices more cost-effective in minimizing arrearages than others?

Similarly, once unpaid accounts enter the caseload, it is desirable to expedite their processing through to resolution in the most efficient manner possible in order to limit the build-up of unpaid amounts as well as the build-up of processing costs. Again, it is necessary to look across all the practices that bear on this objective to assess whether the most effective combination is being deployed. And, the same approach should apply to assure that the most cost-effective combination of practices is being employed to try to avoid repeat instances of nonpayment.

At the highest level, utilities should weigh the costs and benefits of their total customer payment assistance program, encompassing all of the practices involved. The object should not be to simply minimize the total cost of collections, but to minimize it with respect to the benefits desired. These benefits derive from the objectives of the program as discussed above. In consideration of the many ways in which the issue of nonpayment spills over into areas of a utility's public image, customer loyalty and trust, as well as the core mission of enhancing public health in the community, the concept of "benefits" must be regarded far more broadly than the narrow concept of the amount of uncollected revenue.

SUPPORT PROCESSES

There are a number of steps that must be carried out in implementing each of the individual practices that comprise a customer payment assistance program. In many cases, the steps can be carried out in different sequences and at different rates and with varying methods. This presents a range of choices that are not always recognized as such. Often a practice is established and then not revisited for refinement because the refinement loop has not been identified as a deliberate task. Once established, many practices are repeated simply because that is the way they have always been done. Often, the limits to how individual practices can be implemented are rooted in a lack of recognition of the critical role of support processes, including legal services, personnel training, IT, and communications.

First and foremost, there is a challenge presented in making an assessment of the customer's ability to pay and need for assistance. How far should you probe into personal affairs? How do you distinguish customers with true needs from those who appear to be gaming the system? In all intervention steps involving personal information, it is prudent to stop and ask: How far do you go? What information do you really need and how will you use it? How are you going to retain, share, and manage that information? What is your privacy policy?

Other challenging judgment calls concern the legal limits on the utility's capabilities to act in various ways as well as the policy limits imposed by utility governing or regulatory bodies. When an assistance program is being coordinated with external social services agencies, complexities arise in determining the best manner in which to structure inter-organizational relationships. It could be that external agencies whose core mission is assistance are, in fact, better suited to a number of practice implementation functions for which utility personnel are not trained or professionally inclined.

A final challenge involves the coordination of the overall program strategies and practices across all the areas that are involved. Above all, this can pose challenges in organizational policies. What is the best way to organize within a utility for program implementation? How is coordination to be accomplished across departments: customer service, billing, collections, public communications, finance, legal, and field service? Should a specially trained case worker approach be considered to manage all aspects of practice implementation from intake to resolution? What are the pros and cons of case worker empowerment and flexibility versus detailed policies and procedures?

With so many choices to make in defining the approach to implementation across so many practices, it seems unlikely that the starting combination will be optimal, or that there will ever be a single way to do things that is best in every circumstance. This highlights the need for measurement of performance and continual improvement. It also highlights the complexity of the external communications strategy required to support a customer assistance program that can have a multitude of different points of customer and public communications distributed across a variety of players within the organization.

PERFORMANCE ASSESSMENT AND CONTINUAL IMPROVEMENT

An essential part of a quality management approach is the definition and measurement of performance indicators. These are developed by examining the overall business process as well as each of the individual practices that comprise it with an eye toward the outputs that the total process and the individual practices are intended to produce. These outputs are examined to determine how many of them can be characterized in measurable terms.

Within the business literature, a number of measures are discussed to evaluate the cost-effectiveness of collections processes. Chief among them is the uncollectibles rate. Measures of the cost of collections per dollar of cost recovered are also straightforward. Additional measures of process performance would be the number of disconnections per year, the level of arrearages, the level of write-offs, the proportion of delinquent accounts committed to payment plans, the success rate of payment plans, and the number or proportion of overdue accounts that are repeatedly delinquent in payments.

Such measures of process performance may have to be weighed in the context of (i.e., normalized with respect to) background cost escalations. During periods of rapid cost escalation, collections problems tend to increase. This is equally true whether the cost escalation

is taking place on the utility bill due to water industry cost drivers or due to general inflationary trends in the economy that are affecting household budgets. Water bills can also be driven up due to extraordinary costs for other services such as wastewater treatment costs that often appear on the same water bill.

Process efficiency might be examined by a measure such as the total beginning-to-end time and effort involved in resolving a case. Various steps in the process can also be examined individually in this respect. A number of steps that depend on the efficacy of either internal or external communications and coordination efforts can be examined for possible measures.

As discussed at the beginning of this chapter, water utilities also have a broad range of higher goals than bill collection that are part of the mission of a customer payment assistance program. Measures of performance should also be sought with respect to these goals. Some aspects of how customer payment assistance affects the utility's image and customer/stakeholder perceptions might be integrated into standing opinion survey efforts to track community opinions of utility overall performance. Other measures of community welfare might also lend indirect insight on the efficacy of customer payment assistance programs, or at least help substantiate the need for them. Tracking eviction rates in the community may provide a useful background. Other measures of health and well-being, especially in the disadvantaged part of the population, may not connect directly, but lend useful context.

UPSHOT

The application of a business process framework to customer payment assistance programs allows utilities to recognize such programs as a distinct business components and enables a systematic approach to their development and continuous improvement—to the benefit of all customers and residents of the community. As illustrated in [Figure 2.1](#) (above), this framework provides a map that can help utilities define a path, gain confidence that their program is on the right track, and gain acknowledgment of that fact from customers, stakeholders, and governing bodies.

CHAPTER 3

CURRENT PRACTICES IN CUSTOMER ASSISTANCE PROGRAMS

This chapter summarizes the results of two surveys conducted to characterize current practices in customer payment assistance programs in the water industry. The first was a Web survey of utilities conducted in 2004 on behalf of the Water Utility Council of the American Water Works Association (AWWA) to investigate the problems of nonpaying residential customers and the services utilities provided to assist payment-troubled customers (Rubin et al. 2004). The second was conducted in 2008 as part of the current research project, employing a content scan of utility Web pages to profile the current prevalence and extent of utility programs.

AWWA 2004 SURVEY OF UTILITY PRACTICES

After a pretest of a Web-based survey instrument (conducted from February 10 to February 18, 2004), the final survey was conducted from March 1 to March 18, 2004. The survey invitation was sent to a membership list of approximately 4,500 water utilities (by fax or email) by AWWA in the form of a “utility alert.”

The Web survey produced 338 complete responses, which reflects a typical percentage (7.5%) received for this type of survey method. Most of the responding utilities were publicly owned and medium-sized: about 41% of the responding utilities served between 3,301 and 33,000 accounts (i.e., between 10,000 and 100,000 persons served). [Table 3.1](#) lists responding utilities by residential account size. About 82% of respondents were government-owned, 4% were private, and 1% were both publicly and privately owned; 11% indicated they were owned by “other,” including customer or member owned, nonprofits, and special districts.

The average annual household bill for water service from responding utilities was between \$200 and \$300 (see [Table 3.2](#)). Over two-thirds of utilities typically experienced less than 1% of their water bills unpaid, and about 14% experienced between 1.1% and 2.0% (see [Table 3.3](#)). Total unpaid bills averaged less than \$25,000 per year.

Of responding utilities, 64% did not rate nonpayment of water bills as a big problem. Similarly, 54% did not rate it as a growing problem. However, 22% did rate it as a big problem, and 29% thought it was a growing problem (see [Tables 3.4](#) and [3.5](#)).

In general, as the size of a utility increases (by accounts served), or as the size of a utility’s average annual bill increases, water bill nonpayment is viewed as more of a problem. Whereas 22% of all utilities agreed that nonpayment is a big problem, one-third of utilities serving more than 33,001 accounts (> 100,000 people) agreed that nonpayment is a big problem. And, while only 29% of all utilities agreed that nonpayment is a growing problem, 40% of utilities serving 33,001 or more accounts (> 100,000 people) considered that nonpayment is a growing problem. Finally, 33% of utilities with the largest annual bills (\$500 or higher) felt nonpayment is a big problem, compared to 22% of utilities overall.

Table 3.1
About how many residential accounts does your water utility serve and bill?

a) 0	2	0.59%
b) 1–1,000	46	13.61%
c) 1,001–3,300	92	27.22%
d) 3,301–33,000	137	40.53%
e) 33,001–150,000	46	13.61%
f) 150,001–500,000	14	4.14%
g) More than 500,000	0	0.00%
h) Don't know	1	0.30%
Total responses	338	

Table 3.2
What is the average annual bill for water service for a residential customer?

a) \$0–\$100	55	18.21%
b) \$101–\$200	56	18.54%
c) \$201–\$300	78	25.83%
d) \$301–\$400	41	13.58%
e) \$401–\$500	37	12.25%
f) More than \$500	30	9.93%
g) Don't know	5	1.66%
Total responses	302	

Table 3.3
What is your utility's typical percentage of unpaid residential water bills?

a) None	26	8.61%
b) 0.1%–1.0%	176	58.28%
c) 1.1%–2.0%	43	14.24%
d) 2.1%–3.0%	17	5.63%
e) More than 3.0%	16	5.30%
f) Don't know	24	7.95%
Total responses	302	

Table 3.4
On a scale of 1 to 7 (where 1 means “strongly disagree” and 7 means “strongly agree”), please rate how much you agree or disagree with the following statement:

Nonpayment of residential water bills is a big problem for our utility		
1-strongly disagree	52	17.22%
2-disagree	75	24.83%
3-somewhat disagree	67	22.19%
4-neutral	39	12.91%
5-somewhat agree	31	10.27%
6-agree	21	6.95%
7-strongly agree	15	4.97%
No response/response error	2	0.66%

Table 3.5
On a scale of 1 to 7 (where 1 means “strongly disagree” and 7 means “strongly agree”), please rate how much you agree or disagree with the following statement:

Nonpayment of residential water bills is a growing problem for our utility		
1-strongly disagree	52	17.22%
2-disagree	66	21.85%
3-somewhat disagree	46	15.23%
4-neutral	46	15.23%
5-somewhat agree	45	14.90%
6-agree	23	7.62%
7-strongly agree	21	6.95%
No response/response error	3	0.99%
Total responses	302	

If a customer has problems paying his or her bill, the survey revealed that utilities offer the options displayed in [Table 3.6](#). Viewed in terms of the process framework described in Chapter 2, these results indicate that utility programs intended to “shrink the overdue caseload and arrearages” through such methods as payment plans and referrals are much more prevalent than programs that “shrink the bills” through methods such as conservation, bill discounts, and special billing arrangements.

Most utilities do not have specified eligibility criteria for assistance programs. However, 16% have their own eligibility criteria and 9% base eligibility on whether customers are

receiving benefits from other assistance programs (see [Table 3.7](#)). About 15% of the utilities selected the “other-please specify” response. The most common comments they provided were: “eligibility determined by another agency or body,” “eligibility determined on a case-by-case basis,” and “everyone is eligible.”

Table 3.6
Options facing payment-troubled customers

	Percent ^a	N
Payment plan that allows customer to pay amount due over time	76%	231
Customer referral to private, nonutility agency	54%	163
Customer referral to a local government agency for assistance	49%	149
Education	35%	105
In-home conservation assistance	25%	76
Special billing arrangements	21%	64
Change in the rate customer is charged	8%	24
“Other” ^b	8%	24
One-time bill credit from utility funds	3%	8

a. Percents do not add up to 100 because utilities were permitted to select more than one option.

b. “Other” options include accepting postdated checks, payment by credit card, offering a tiered rate corresponding to water use, and elderly assistance programs.

Note: In addition, a question revealed that 92% of responding utilities occasionally disconnect service of nonpaying customers.

Table 3.7
How is eligibility determined for your financial assistance program(s)?

a) We have our own eligibility criteria	41	16.08%
b) Eligibility is based on whether customers are receiving benefits from other programs	22	8.63%
c) Other, please specify	37	14.51%
d) Don’t know	9	3.53%
e) None, or does not apply	161	63.14%
No response	0	0.00%
Total responses	255	

Note: Utilities were permitted to select more than one option.

The most common reasons utilities stated for not having an assistance program include (Table 3.8 lists all responses): all customers should pay their own way (60%), the utility does not have a problem with late payments (51%), the utility does not need a low-income assistance program (40%), and the utility cannot afford to pay for an assistance program (40%).

Most utilities (65%) that assist payment-troubled customers spend less than \$25,000 annually on their program; just 7% spend over \$25,000 (other utilities either did not know or did not respond to this question) (see Table 3.9).

Utilities obtained funds for their assistance programs from: a nonprofit organization (21%); voluntary contributions from customers (14%); utility budget (14%); local government (10%); “other” (4%); fund raisers (3%); and contributions from utility employees and/or stockholders (3%) (see Table 3.10). “Other” funding sources cited included mostly state and local government programs (e.g., “town mayor solicited funds from community businessmen”).

Table 3.8
Reasons why utility does not have an assistance program

	Percent ^a	N
All customers should pay their own way	60%	21
Utility does not have a problem with late payments	51%	18
Utility does not need a low-income assistance program	40%	14
Utility cannot afford to pay for an assistance program	40%	14
Utility does not have many low-income customers	34%	12

a. Do not add up to 100 because utilities could select more than one option.

Table 3.9
What is the total annual cost to your utility for all assistance programs?

a) Less than \$25,000	165	64.71%
b) \$25,001–\$100,000	11	4.31%
c) \$100,001–\$500,000	4	1.57%
d) \$500,001–\$1 million	1	0.39%
e) More than \$1 million	1	0.39%
f) Don’t know	60	23.53%
No response	13	5.10%
Total responses	255	

Table 3.10
Sources of funding for utility assistance programs

	Percent ^a	N
Nonprofit organization	21%	54
Voluntary contributions from customers	14%	35
Utility budget	14%	35
Local government	10%	26
“Other”	4%	9
Fund raisers	3%	8
Contributions from utility employees and/or stockholders	3%	7

a. Do not add up to 100 because utilities could select more than one option/leave fields blank.

Forty percent of responding utilities thought their current assistance programs did not sufficiently address current needs, while 31% thought they did address current needs (see [Table 3.11](#)).

Table 3.11
On a scale of 1 to 7, please rate how well you think your existing assistance program(s) address current needs (1 = not well, and 7 = very well)

1-strongly disagree	31	11.61%
2-disagree	26	9.74%
3-somewhat disagree	51	19.10%
4-neutral	77	28.84%
5-somewhat agree	23	8.61%
6-agree	33	12.36%
7-strongly agree	26	9.74%
Total responses	267	

A question in the survey asked, “What are the gaps, problems, or unmet needs in any assistance program(s)?” Common responses included:

- Available funds (25% of responses)
- Need to determine customers in need apart from irresponsible customers
- Tight eligibility criteria (e.g., if a customer is poor but not senior or disabled, he or she is not eligible for some programs)
- Customers that have chronic financial challenges when programs address one-time emergencies

- Delay in customer request for help until after disconnection of service
- Reaching all customers in need
- Education/program awareness
- Slow turnaround of payment: vouchers not presented by customers or are not paid in a timely fashion
- Lack of communication by local assistance groups; utilities do not know how much assistance customers receive once they are referred to another agency
- Lack of personnel to meet with customers requesting assistance

WEB PAGE PROFILE OF 2008 UTILITY PRACTICES

The Association of Metropolitan Water Agencies (AMWA) provides a listing of the Web pages of its 194 utility members responsible for providing water utility service to consumers throughout the US. A systematic search and content scan of these home pages was conducted in August 2008 to assess the current state of practices in customer payment assistance as evidenced from a utility's Web presence.

Of the 194 utilities, 104 provide assistance programs that can be identified from their home page on the Internet. Customer assistance programs were categorized according to two strategies defined in the process framework outlined in Chapter 2. Strategy 1, "Shrink the Bills," combines conservation, rate discounts, and alternative rate structure and payments to lower customers' water bills. Strategy 2, "Shrink the Overdue Caseload and Arrearages," involves financial assistance, payment arrangements, and prevention to limit the number of customers who have trouble paying their bills. Both strategies are widely employed.

Under Strategy 1, the most common assistance programs are rebates for the purchase and installation of water saving fixtures, such as low-flow toilets and showerheads. Many utilities also provide free water efficient retrofits and efficiency kits designed to aid the customer in conserving water, thus lowering their water bill. Additional customer assistance programs include low-income discounts, through which eligible customers are charged at a lower rate for their water usage. Overall, 69 utility programs were identified under Strategy 1 that seek to reduce monthly water bills.

In accordance with Strategy 2, many water utilities offer financial assistance programs. These substantially outnumbered low-income discount programs, as a means of assisting customers. To conduct these programs, utilities may solicit donations from other customers that are often matched by the utility. Donations are then placed in a central fund, frequently administered by a local charity, where it is used to benefit struggling consumers. Overall, 62 utility programs were identified that sought to shrink the overdue caseload and arrearages in this manner under Strategy 2.

Beyond these programs, many utilities have adopted the practice of posting the customer service phone number on their Web site along with encouragement to call and get assistance in resolving missed payments. This has the potential to reduce the overdue caseload and arrearages by encouraging customers in need of financial assistance to notify the utility company before arrearages begin to mount. Many utilities also indicate the types of payment and settlement options available to customers through granting extensions, creating new payment arrangements, administering budget billing options, and allowing customers to pay online and over the phone. Internet and phone payments are important options for customers with access to such methods,

since they enable last minute payments before shutoffs. Currently, 140 AMWA members indicate the availability of phone and/or online payment methods on their Web sites.

While these programs provide assistance to customers with diverse financial challenges, utility companies can further improve their service to the community by enhancing Web site usability. Generally, information on these programs was located two layers from the home page. It is often difficult to find many of these programs without clicking on a number of links. Much of the relevant information for customers seeking assistance was accessible through customer service and rebate tabs and sidebars. Additionally, many utilities presented this information under frequently asked questions, online payment options, and a number of payment related links.

Once the information on customer assistance programs was found, however, the relevant information was usually presented clearly and succinctly. Most utilities did a good job of providing informative program descriptions while delineating the eligibility requirements and benefits of the program in lay terms. Clarity and brevity ensures the accessibility of online information.

CHAPTER 4

PRIOR STUDIES OF CUSTOMER ASSISTANCE PROGRAMS

This chapter reviews several previous studies that have described customer payment assistance programs in the water and wastewater industry in some detail. These sources are all quite accessible to utilities and are recommended reading. In general, a wide array of practices are described and documented in these studies but a unifying and organizing framework, such as the business process approach described in Chapter 2, is lacking.

WATER AFFORDABILITY AND ALTERNATIVES TO SERVICE DISCONNECTION

This article (Beecher 1994) in the *Journal of the American Water Works Association* documents a wide range of practices for providing assistance to payment-troubled customers that have been demonstrated in the water sector and that a number of prominent utilities have been applying for a long time. The article provides a short description of many of the practices classified under the “shrink the bills” and “shrink the overdue caseload and arrearages” categories of the business process framework presented in Chapter 2. The article provides a number of examples drawn from utility experiences. It also provides a number of insights regarding the appropriateness or rationale for each practice in different situations and of the pros and cons of each practice in terms of implementation.

WATER AFFORDABILITY PROGRAMS

Research report 90732 (Saunders et al. 1998) published by the Water Research Foundation, summarizes results of a research effort that focused on exploration of the feasibility of alternative rate designs to improve affordability. Considerable analysis is applied to options for varying the customer (or fixed) charge, discounting the volume charge, and incorporating a lifeline within inverted block rates. Alternative wastewater rate structures are also studied. In addition to these research results, the report is a useful resource document that covers an extensive array of other issues involved in “shrinking the bills” and “shrinking the overdue caseload and arrearages,” including a number of case examples from active programs in various cities. The report also provides chapters relating to legal issues, program strategies to help tenants who pay for water through rents, approaches to program outreach, and approaches to administering program eligibility.

WATER UTILITY OPTIONS FOR LOW-INCOME ASSISTANCE PROGRAMS

This article (Hasson 2002) in the *Journal of the American Water Works Association* provides a thorough account of the development of low-income assistance programs in Portland, Ore., from the mid-1980s to 2002. The case history documents the social and political context in which the programs emerged and describes the evolution of the utility’s strategy at each stage, including options considered and research conducted to guide development and track progress. While the eventual program consists of a combination of approaches to “shrinking the bills” and “shrinking the overdue caseload and arrearages,” it is also notable for its explicit strategic elements that make it an excellent example of the type of business process approach

recommended in Chapter 2. The case study documents the efforts Portland undertook to work with their governing body to carefully define program objectives. It also discusses performance measurement efforts that were undertaken to assess program effectiveness in meeting the objectives as well as continuous improvement efforts that were stimulated as a result.

THINKING OUTSIDE THE BILL

Published by the AWWA, this booklet (AWWA 2005) is intended as a primer to provide utility managers and governing board members with an overview of the problem of assisting low-income customers and the range of possible solutions that are available. It is an ideal resource for utilities that do not have an established program and need to educate Board members and others in the community about the possibilities. Of particular value, this report provides a guide to using US Census data to assess the potential extent of affordability problems within any jurisdiction. These types of data are valuable for establishing a clear set of objectives for a customer assistance program as discussed further in Chapter 6. The book also provides an overview of the range of options that are available for “shrinking the bills” and “shrinking the overdue caseload and arrearages.” In addition, it contains advice on expanding outreach for assistance programs through close coordination with allied low-income assistance programs in the community.

AFFORDABILITY OF WASTEWATER SERVICE

Published by the Water Environment Federation, this booklet (Hasson et al. 2007) is appropriate for utility management teams and governing boards interested in starting or expanding their efforts in customer assistance programs. It explains the range of issues that need to be appreciated by decisionmakers relating to each of the aspects of designing and implementing a program. The range of options for “shrinking the bills” and “shrinking the overdue caseload and arrearages” is reviewed. Particular attention is called to limitations on lowering user charges for wastewater service under the Clean Water Act. The booklet is comprehensive without being overwhelming. It covers much of the scope outlined in the business process framework outlined in Chapter 2, but at a very high level that can be useful in acquainting decisionmakers and others in the community with all the elements of a complete program. It covers such topics as defining objectives in terms of target groups for assistance and measuring performance as a means of driving continual improvement.

COMMITTEE FOR MELBOURNE DEBT SPIRAL PROJECT

The Utility Debt Spiral Project was undertaken by the Committee for Melbourne as part of its involvement in the United Nations (UN) Global Compact—a joint initiative between businesses and the UN to support and encourage responsible business operations and universal values. The approach focuses on engaging business, local government, and civil society to ensure optimal medium and long-term social, cultural, and economic outcomes. The project report (Melbourne 2004) presents a broad collection of ideas from water and energy utilities in Australia as well as stakeholder groups. A large collection of detailed case studies of utility customer assistance programs was also assembled. From this body of practical knowledge and

experience, the report extracted a summary of the proposed elements of a best practice program, as follows:

- The implementation of agreed upon, appropriate, and affordable payment arrangements, with flexibility to suit each customer, including:
 - Centrepay (automatic debiting for households on assistance)
 - Incentive plans
 - Partial or complete waiver of debt
 - Review of fees
- Suspension of disconnection, debt collection, legal action—while customers are on the hardship response program
- A specialist team skilled in responding to customers experiencing hardship, which:
 - The retailer’s call centre and other staff refer customers to appropriate representatives
 - Customers are able to contact directly
 - Conducts home visits where it has been difficult to contact a customer by phone or in writing
- Staff training on:
 - Causes of financial hardship
 - Identification of customers experiencing hardship, including proactive identification
 - Literacy and access issues experienced by some customers
 - How to talk to customers experiencing hardship
 - When to refer customers to the hardship response program
- A hardship policy that is clearly communicated to customers
- An articulation of the rights of customers experiencing financial hardship
- Links to:
 - Energy/water efficiency programs
 - Financial counseling agencies
 - Concessions, government assistance, nongovernment support services
 - Dispute resolution services
- Continuous review, including customer focus groups to gain feedback on hardship programs

These elements bear many similarities to those of the business process model discussed in Chapter 2.

CHAPTER 5

OBJECTIVES: SIGNIFICANCE OF CUSTOMER PAYMENT ASSISTANCE



One of the most profound benefits of quality management is that the simple exercise of defining discrete business processes forces a concentrated focus on objectives. In contrast, when an ad hoc collection of practices is being implemented without formal recognition of the intent of the overall process, the sense of purpose can get lost. It can then become very difficult to assess how the overall effort is performing or to identify needs and methods for improving performance. In addition, having a shared sense of purpose is essential to the coordination and integration of practices that may need to be implemented across departments.

At the present time, the objectives of customer payment assistance programs in water utilities are understated (or even unstated) and under-appreciated. This results as much from the absence of a business process model as it does from some subtleties that need to be brought closer to the surface to raise awareness of the social significance of customer payment assistance.

The principal objective of customer payment assistance programs is most commonly viewed as a matter of supporting bill collection. Utilities have the same fundamental interests in cost recovery and cash flow as all other business enterprises, so this is a necessary objective. As documented in [Figure 5.1](#), however, results of a water industry survey conducted in 2004 (Rubin et al. 2004) indicate that the level of uncollectibles is generally low, with overdue accounts amounting to less than 1% for most utilities. This narrow financial perspective tends to downplay the importance of efforts to assist payment-troubled customers in accomplishing the larger public utility mission. There are at least three additional dimensions that are quite important: customer/stakeholder perceptions, public health, and sustainability.

IMPLICATIONS FOR CUSTOMER AND STAKEHOLDER RELATIONS

The uncollectibles rate may be maintained at levels below 1% of a water utility's customer base *at any given point in time*. However, [Figure 5.2](#) (Rubin 2005) shows that nationwide there are an estimated 10 million households with annual incomes below \$20,000 [roughly equivalent to 125% of the Federal Poverty Level (FPL)] that pay a water bill. This compares with a total 64 million households that pay water bills to community water systems. It is conceivable therefore that, *over time*, as much as 15% (10/64) of the customer base nationally might come into contact with a utility's bill collection practices. In some communities, the proportion can be much higher. Further, the effect of collections practices on overall customer perceptions of the utility reaches beyond low-income groups, such as when a shut-off draws attention from community activists or it is covered in the local news media.

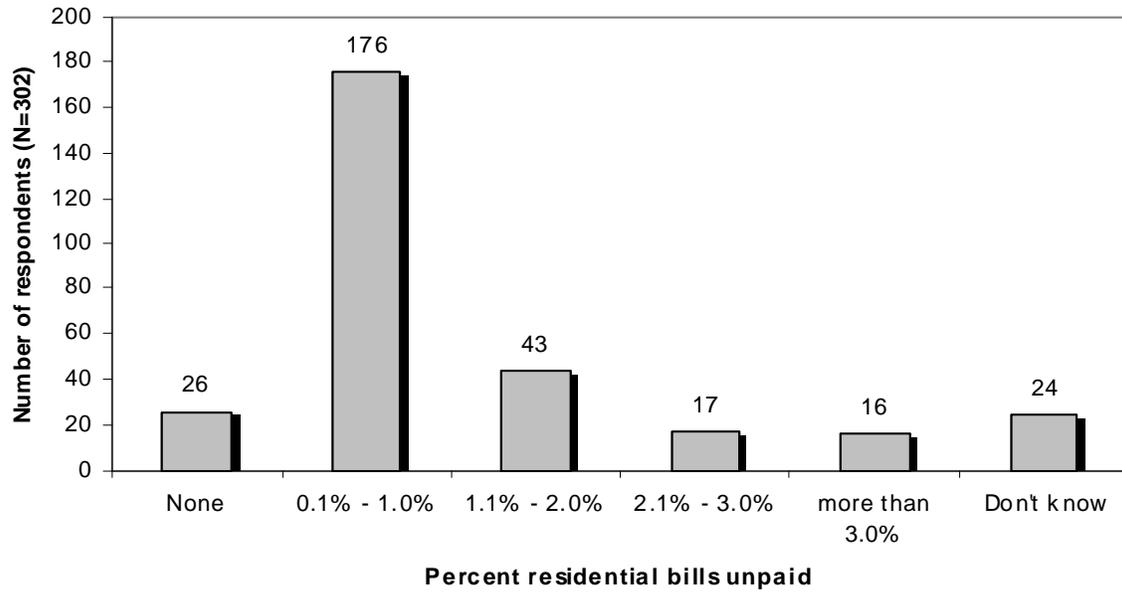


Figure 5.1 Range of water utilities' level of uncollectible residential bills, 2004

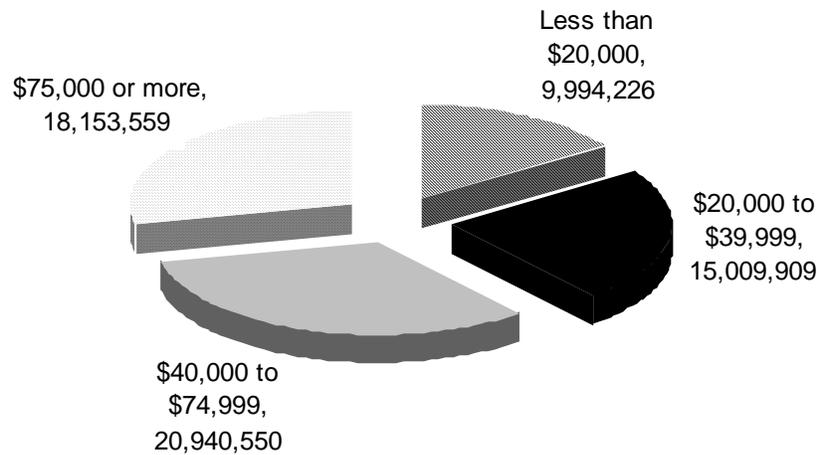


Figure 5.2 Number of customers paying directly for water and wastewater service, by annual household income in 1999

The manner in which a water utility approaches (or ignores) the issue of nonpayment affects customer perceptions of the utility. Needless to say, customers are essential stakeholders. Customers vote, call television stations, or file complaints with State regulatory commissions when displeased with the way they are treated, especially in matters involving customer service. Utilities cannot therefore afford to regard their practices pertaining to the resolution of unpaid accounts as a small matter involving less than 1% of customers. The significance to a utility's

public profile and community image is clear. Although it may seem counterintuitive, this area of practice presents an opportunity to build a broad base of customer satisfaction, loyalty, and trust.

IMPLICATIONS FOR PUBLIC HEALTH

Another significant dimension of the problem of nonpayment relates squarely to public health—the very heart of a water utility’s mission. Several studies have quantified the level of hardship experienced by low-income households and the order of trade-offs that those households make to try to obtain their basic necessities. Bauman has described the level of hardship as follows: “In 1995, ... about 1 person in 5 lived in a household that had at least one difficulty meeting basic needs. These included households that didn’t pay utility bills, didn’t pay mortgage or rent, needed to see the doctor or dentist but didn’t go, had telephone or utility service shut off, were evicted, didn’t get enough to eat, or otherwise didn’t meet essential expenses” (Bauman 1999). Bauman quantified the number of households experiencing various types of hardships, as shown in Figure 5.3 (Bauman 1998).

More recent research in this area confirms the same ordering of hardships, with only slight differences in the specific percentages (Iceland and Bauman 2007).

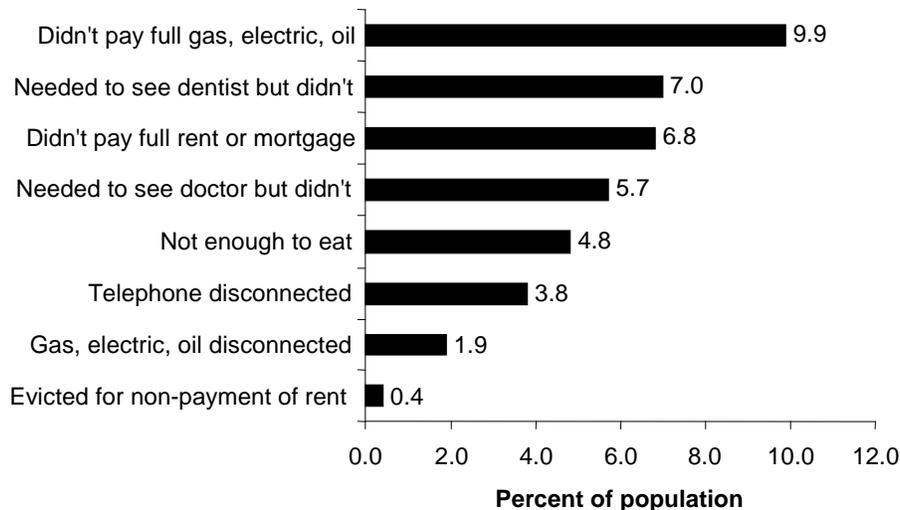


Figure 5.3 Percent of US population that experienced hardship in 1995

This ordering of hardships makes it possible to draw inferences about the order in which low-income households trade off payments among basic necessities. From discussions with low-income advocates and utility representatives, it appears that the disconnection of water and wastewater service would occur with a frequency between energy disconnection and eviction. Essentially, the disconnection of water and wastewater service is tantamount to eviction because the property becomes uninhabitable, both legally and practically. Thus, in communities where the penalty for nonpayment is service disconnection, low-income families may be expected to reduce their expenditures on health-related items such as medical care, food, child care, or energy service in order to pay the water and wastewater bill. In other words, there is a compelling logic suggesting that water “trumps” other health related expenditures.

Poverty researchers also have concluded that a household's experience of hardships is not solely a factor of current income. Beverly (2001) conducted a useful survey of much of the academic research in this area and concluded that income, poverty, and material hardship "are conceptually distinct." Researchers found that "a family's income-to-needs ratio explained only 24% of the variance in the number of material hardships." Beverly also explained that researchers have found that current income or poverty status fails to account for different standards of living. Households with low levels of current income may have accumulated savings which can be used to purchase goods and services. Some low-income households may have access to credit while others do not. Some households may have ways to obtain goods or services without income or savings, such as through barter or gifts. Equally important, households face different demands on their economic resources, such as the need for health care and child care expenditures.

A later survey by the US Department of Health and Human Services (HHS) (USDHHS 2004) reached similar conclusions. HHS concluded that there are limitations to using income or poverty status as the sole indicator of material hardship. HHS reviewed a number of research studies and conducted its own analysis of available data. It constructed a nearly identical hierarchy to the one shown in [Figure 5.3](#).

Importantly, HHS also looked at the prevalence of hardships for households in different income categories. That analysis consistently found that even households with incomes in excess of 200% of the FPL experienced each type of hardship, though at a lesser rate than households with incomes below 100% of the FPL. For example, 2.2% of all households had their energy service disconnected for nonpayment. Households with incomes below 100% FPL experienced disconnection at a rate nearly three times as great (6.0% of households), while higher-income households (greater than 200% FPL) experienced disconnection at half the overall rate (1.0% of households). But none of the hardship rates fell to zero among higher-income households.

There is little doubt that low-income households need help paying their utility bills. HHS found that 29.4% of households with incomes below 100% FPL did not pay their entire energy bills on time and that 15.1% of households in poverty had their telephone service disconnected for nonpayment. However, providing assistance only to households in poverty would not meet the entire need. Years of research in this field has concluded that the provision of money to households in poverty will not eliminate the prevalence of serious hardships. There are multiple factors that can lead to household hardship and that should be taken into account when evaluating the need for, and target the audience for, customer assistance programs.

As suggested by the hierarchy of hardships, several hardships have a direct effect on public health. In order to pay their utility bills, households make tradeoffs that directly impact their health, such as failing to see a doctor or dentist when needed; failing to get enough to eat; and failing to adequately heat or cool their homes. HHS succinctly summarized the findings from several studies, as follows: "Households with limited resources may make trade-offs among basic needs (e.g., food vs. needed medical care) or choose different allocations of goods and services to make ends meet."

When these induced deprivations have negative impacts on health, it results—directly or indirectly—in outcomes inconsistent with the water utility mission to sustain public health. To place this in perspective, consider that the total national cost of Safe Drinking Water Act (SDWA) regulations promulgated since 1986 has been estimated to be about \$5 billion per year (Raucher and Cromwell 2004). Benefit-cost analyses conducted in developing these standards asserted that health benefits are at least equal to these expenditures. By comparison, if there are

10 million low-income households facing an average water and sewer bill of more than \$400 per year (Rubin 2005), this equates to more than \$4 billion per year to be raised from low-income households. To whatever extent that portion of water revenue is obtained at the expense of other health-related expenditures, the resulting detriment to health could rival the magnitude of improvements to health intended under the SDWA. Water utilities must remain mindful that public health is their core business and there is as much health impact at stake in the manner in which they obtain revenue from low-income households as there is in treating the water to high standards.

IMPLICATIONS FOR SUSTAINABILITY

Figures 5.4, 5.5, and 5.6 present data regarding a final point that magnifies the significance of the issues mentioned previously: water and wastewater costs are going up faster than incomes. Figure 5.4 shows the annual percentage change in the cost of “water and other public services” (which is primarily water and wastewater services) to households from the US Bureau of Labor Statistics’ Consumer Expenditures Survey (CES; US BLS 2008a, 2008b), compared with the overall rate of inflation measured by the Consumer Price Index for each year from 1990 through 2006.

The CES understates the actual cost of water and wastewater service to households because it includes households that do not pay water or wastewater bills directly (such as many renters and houses that are not connected to public water or wastewater supplies). Thus, for example, in 1999 the CES data show a typical cost of \$285 while an analysis of US Census data for the same year shows that households that actually received water and wastewater bills paid an average of \$476 (Rubin 2005). The CES is used here because it provides the only nationwide, annual estimate of the cost of water and wastewater services at the household level.

During this period, water and wastewater costs in the US increased by 105.7% (an annual average increase of 4.6%), while consumer prices increased by 54.2% (an annual average increase of 2.7%).

A similar trend is apparent if water and wastewater costs are compared to the rate of change in median household income (MHI) in each year. Figure 5.5 compares the change in water and wastewater costs with the rate of change in national MHI during this same time period (1990 to 2006).

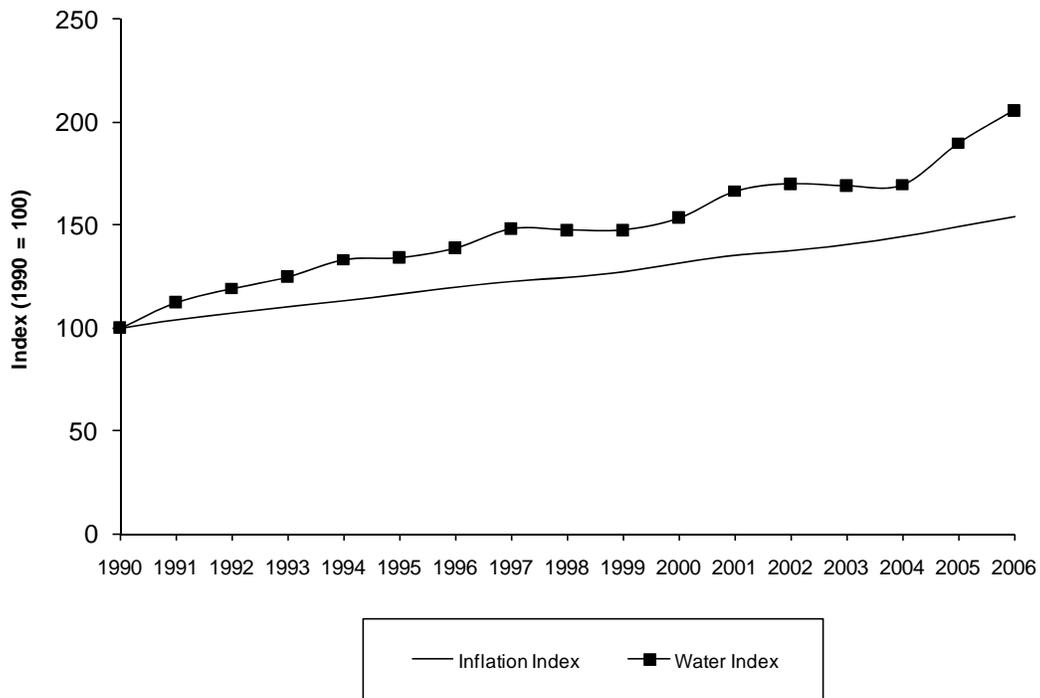


Figure 5.4 Change in water and wastewater costs compared to change in general inflation, 1990–2006 (indexed to 1990 = 100)

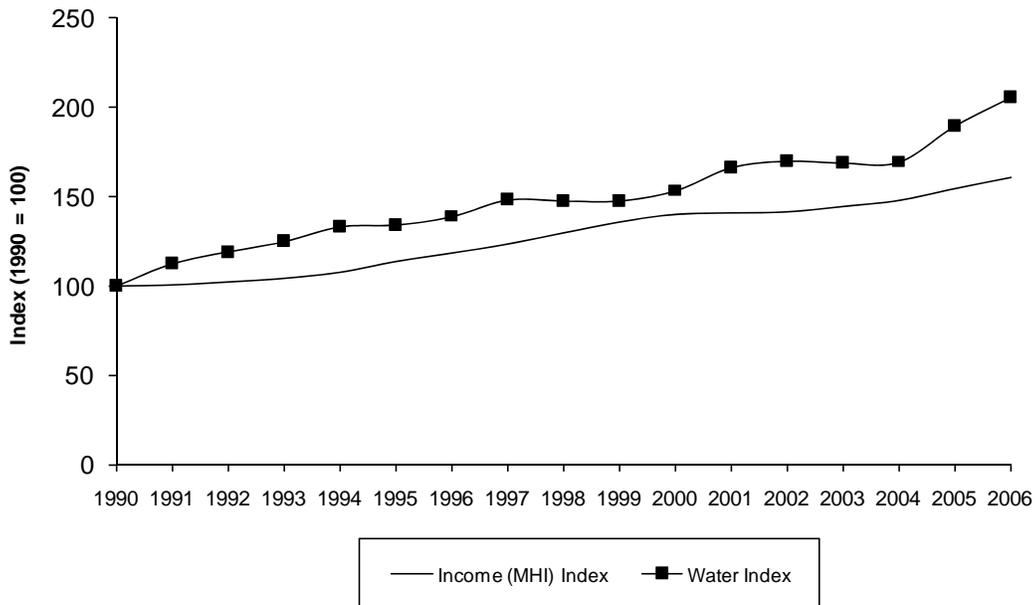


Figure 5.5 Change in water and wastewater costs compared to change in MHI, 1990–2006

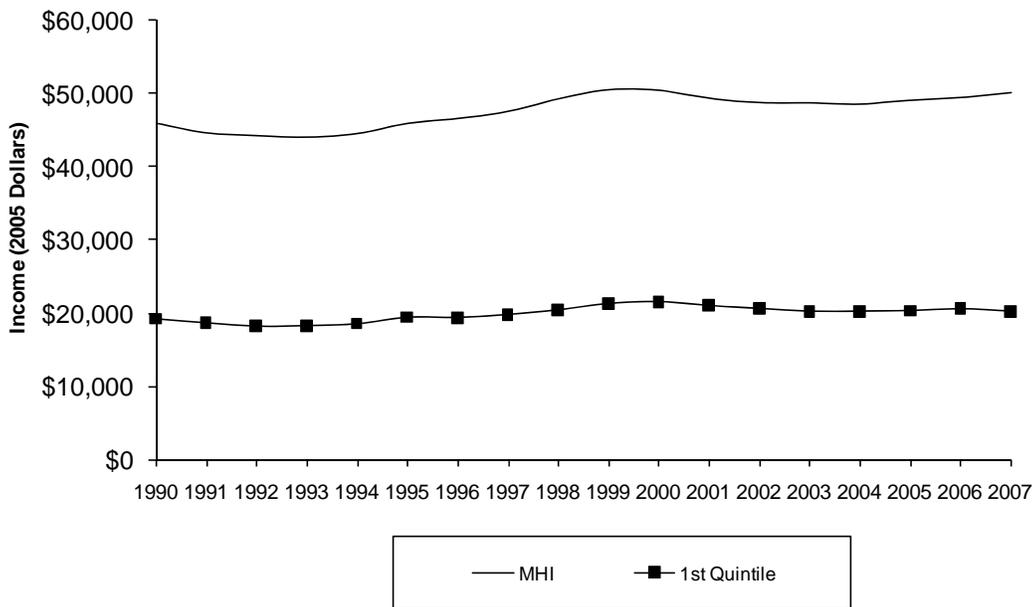


Figure 5.6 Comparison of median and first quintile (lowest 20%) of household incomes in constant 2007 dollars, 1990–2007

Figure 5.5 shows water and wastewater costs increasing significantly faster than a typical household's income. Water and wastewater costs in the US increased by 105.7%—an annual average increase of 4.6% (US BLS 2008a, 2008b). MHI increased by 61.0%—an annual average increase of 3.0% (US Census Bureau 2008).

Another way to view these trends would be to consider what water and wastewater bills would be if they had increased only by the rate of general inflation or typical income change. If water and wastewater bills had increased only with the general rate of inflation from 1990 through 2006, they would have been 25% lower in 2006. Similarly, if water and wastewater bills had increased only as fast as household incomes since 1990, bills would have been 22% lower than they actually were in 2006. Yet even these figures do not provide a complete picture.

The actual impact on households that receive water and wastewater bills is understated by the CES data. In the CES, households that are not on public water and wastewater supplies are included with expenditures of zero, as noted above. According to the 2000 Census, 38% of households did not receive a bill for water and wastewater services (Rubin 2005). Obviously, these nonpaying households' expenditures on water and wastewater may not increase as much over time unless there are strong State regulatory pressures on well and septic systems. Thus, the CES might understate the true magnitude of the increase in water and wastewater costs on households that actually receive bills for those services.

Using data from the 1990 Census only for households that received water and wastewater bills, Rubin shows that the typical household paid approximately 0.9% of its income for water and wastewater services in 1989 (Rubin 1998). The same author's later analysis of similar data from the 2000 Census showed that the typical household paid 1.6% of its income for water and wastewater services in 1999 (Rubin 2005). Thus, over that 10-year period, water and wastewater costs steadily increased to the point where a typical household was paying nearly 80% more (as a percentage of its income) for water and wastewater services than it had a decade earlier. With

looming needs for infrastructure replacement and critical water shortages facing many regions, these trends can only continue.

Whichever figures are used, there is no question that water and wastewater costs are taking an increasing share of households' budgets. Costs are increasing faster than general inflation and faster than the rate of change in typical incomes. Moreover, the above comparisons are based on MHI, reflecting a "typical" household, but as shown in [Figure 5.6](#), incomes in the lowest quintile (i.e., households with the lowest 20% of incomes) of the population have remained flat in real terms for at least a decade (US Census Bureau 2008). So the impact of rising costs in low-income households is conceivably even more significant than it is on median-income households.

Simply, low-income households that are already having difficulty paying for all of their necessities will find it increasingly more difficult to pay their water and wastewater bills. The same will be true for many higher-income households that, due to competing needs (such as higher energy and food costs, increasing needs for health care, among others) are not able to afford all of their necessities. Those difficulties can have a direct impact on public health in the community.

This means that customer payment assistance efforts need to be not only a current priority for utilities but also an area of growing importance. Attaining a best practice level of performance will become integral to the utility's sustainability in terms of finances, stakeholder support, and accomplishment of the core mission to support public health.

The first step in achieving the required level of best practice will be to convey a strong sense of the significance of these issues across all the utility departments that are involved in the cross-cutting process of assisting payment-troubled customers. Establishing a shared understanding of the significance of this function will help gain recognition for it as an essential business process and ensure that all participants are continually mindful of the overall objectives in carrying out their roles.

CHAPTER 6

OBJECTIVES: TARGETING ASSISTANCE PROGRAMS FOR PAYMENT-TROUBLED CUSTOMERS



In a conventional customer service operation, delinquent accounts are referred to the collections department for intervention and resolution, which may include termination of service. The mainstream approach to managing these accounts is to apply swift and firm measures that are designed to assure that the bulk of customers in this caseload will be motivated to pay up quickly and settle their arrears in lieu of being disconnected. This approach is often backed by strong commitments by utility management, governing boards, and local or State laws. Depending upon local demographic and economic

circumstances, this may be successful in maintaining an uncollectible rate at a low level. According to conventional wisdom, this approach breaks down when these treatments are not consistently applied and utilities do not act soon enough, are lenient in collecting deposits, do not follow-up with nonpaying customers in a timely manner, extend due dates longer than they should, and deliver more cut-off notices than they implement (Patrick and Kozlosky 2006).

What is wrong with this conventional model? While it may be true that swift, firm, and consistent actions are effective in treating a large portion of the caseload, there are serious drawbacks. This one-size-fits-all approach to collections results in wasted effort for the subgroup of customers who simply cannot pay. And, the lack of a more appropriate treatment for true hardship cases will eventually draw public scrutiny—especially if the community has a high incidence of poverty or if the number of disconnects rises during hard economic times. Once the governing board is prompted to take action to address the problem, utility managers may have to live with the business consequences of whatever political prescription is written. Best practice in the design of customer assistance programs is to deliberately design them as a business process rather than letting them evolve in an ad hoc manner. The key is targeting. An optimally effective customer assistance program is one that is based on a thorough understanding of the payment-troubled segments of the service population and one that applies tailored approaches to treating the caseload of delinquent accounts within each segment.

The need for a utility to characterize and segment its overdue caseload arises from a recognition that the payment troubles of differing customers are a result of differing circumstances. To treat the problems most effectively, the utility should be aware of the underlying circumstances so that it can take them into account in offering a collections response. Different collection tools will be necessary to remedy different collection problems. As the saying goes, when your only tool is a hammer, you tend to see every problem as a nail. To decide what tools are best, the utility needs to be able to specify what problems it is seeking to “fix.”

UNDERSTANDING THE CAUSES OF NONPAYMENT

Low income is obviously a major determinant of payment troubles. Recent research efforts have produced findings that one-third of customers within the lowest income quintile have had months where they could not pay all their utility bills on time (Iceland and Bauman 2007). Service disconnections are also very concentrated within the lowest income households—amounting to three times the average rate. From survey findings presented in Chapter 4, it appears that most water utilities have been successful in keeping the overall uncollectibles rate within a 1 to 3% range. But the overall average may disguise a much larger problem in the lower income segment of the customer base.

Financial hardship is defined as the condition that exists when a household's budget constraint forces trade-offs to be made between competing essential needs such as housing, utility services, food, and medical care. When household budgets are operating very near the hardship threshold, it does not take much of an upset to force trade-offs that may involve a utility bill.

Figure 6.1 presents a visual characterization of this hardship threshold. The Federal Poverty Level (FPL) was originally defined as an approximation of only the cost of food. Hence, realistic assessments of the level of income associated with poverty are often expressed as multiples of the FPL. Multiples of 1.5 to 2 times the FPL are common benchmarks of the true poverty line. The diagram in Figure 6.1 assumes that there is a threshold level of income somewhere between 1 and 2 times the FPL that is required to routinely pay for essential household needs. In any given month, there are some households in the community that will slip below the threshold level of income and possibly be unable to pay a utility bill. This is indicated by the wavy lines across the diagram, representing possible fluctuations in available budgets of typical households within this income range. Such fluctuations could arise from a variety of sources.

Community demographic data from the US Census can be used to assess the proportion of a utility's total customer base that is comprised of households with incomes lower than 2 times the FPL (AWWA 2005). In contrast to the 1 to 3% uncollectibles rate reported by water utilities, national data on household incomes (discussed in Chapter 5) suggest that 15% of all water customers may lie within this hardship threshold range. The proportion may be higher or lower from one community to another, but it is much larger than 1 to 3%.

A recent survey of households that have experienced disconnection showed that the causes of financial hardship are both chronic and episodic (Victoria 2005). Over 70% of respondents reported difficulty in paying household bills in the period leading up to disconnection. In addition, however, specific contributing factors were also reported, as follows:

- 40% reported an unusually high utility bill prior to disconnection
- 28% reported loss of work
- 20% reported illness or injury
- 20% reported a family relationship breakdown

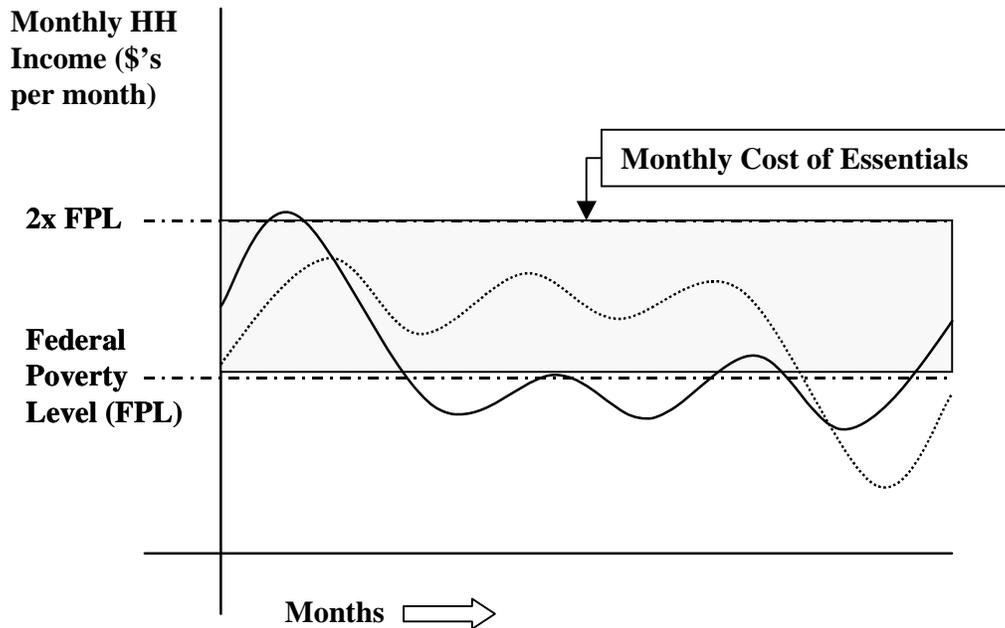


Figure 6.1 Financial hardship resulting from trade-offs between essential needs. The wavy lines illustrate month-to-month fluctuations in household income that could arise from a variety of sources and result in various patterns.

A recurring debate has developed in the collections field around the issue of distinguishing between customers that “can’t pay” because they do not have the money and those that “won’t pay” because they do not want to spend their money (Victoria 2005). The conventional swift and firm approach to collections is supported by this distinction. It is reasoned that the threat of disconnection is the only sure way to force a large proportion of the “won’t pay” group to pay their bills. The steady pressure to pay is widely endorsed as the most effective means of preventing freeloaders from gaming the system or of allowing the accumulation of large past-due amounts in arrears.

To the contrary, it is argued that many customers regarded as being within the “won’t pay” group are better characterized as “unable to pay when due.” This recognizes that many of these households are within the income range that is afflicted by financial hardship, facing tough budget trade-offs that can be provoked by a variety of circumstances. These are not freeloaders. Surveys of disconnected customers indicate that most people want to pay their utility bills on time if it is at all possible for them to do so (Melbourne 2004, Victoria 2005, Accent 2007). For the most part, this “unable to pay when due” group are not gaming the system to get more time to pay, they are simply surviving in the face of tough choices. Many have had to learn to master the game of survival quite well, but they should not be automatically regarded as freeloaders.

When the conventional approach to collections is vigorously and uniformly applied to reduce uncollectibles to the 1 to 3% range, there is a much larger percentage of “unable to pay when due” households that are pressured into paying at the expense of other household necessities. Many of these same households will be back in the queue again at some future time because they are operating near the threshold of financial hardship. The conventional approach to collections is prone to breaking down in circumstances where this larger body of payment-

troubled customers makes their presence known. When economic times are unusually hard, increasing numbers of disconnections draw more political attention and utilities can lose support for applying swift and firm pressure leading to disconnections.

The alternative to the conventional approach to collections is the development of a comprehensive customer assistance program as a deliberate business process that recognizes the underlying causes of nonpayment. It still relies on swift action that can lead to disconnection, but with additional options for reducing the caseload and arrearages that are devised as targeted solutions to specific types of nonpayment problems.

TARGETING THE CAUSES OF NONPAYMENT

Despite the concentration of payment troubles within the low-income segment of the population, the incidence of nonpayment problems and disconnections extends across all income brackets. Many of the causative factors are the same. The following general categories of related causative factors capture most situations:

- Crisis conditions—A sudden change in household income resulting from such events as loss of a job, disability due to illness, death of a wage-earner, large medical bills, recovery from natural disaster, family relationship issues, etc.
- Affordability and/or money management problems—Money is scarce. Household income is near the hardship trade-off threshold. Income is highly irregular. Money management skills are not well-developed. Family problems intervene in budget priorities. These causes may be indistinguishable and they may co-occur with other causative factors.
- Elderly or disabled limitations—Two causative factors arise in these groups. Many are dependent on one or several sources of fixed income that limit their latitude to absorb rate increases or major rate shocks. Many are limited in their physical, mental, and communications capabilities, making it difficult to understand complicated billing issues or to navigate complicated payment procedures.
- Older housing with bad plumbing—Where low- or fixed-income households and older housing come together, water bills can be much less affordable than they should be due to excessive consumption resulting from inefficient plumbing systems.

The conventional approach to collections might proceed in four steps as follows: (1) a late notice is issued after 15 days; (2) a late fee is posted at 30 days and a shut-off warning is issued; (3) a collections agent contacts the customer to seek payment; (4) a shut-off notice is issued at 60 days and implemented soon thereafter. This process is not designed to address the different types of causative factors; it treats every case as though the underlying cause is poor money management that requires external discipline from the threat of disconnection. Ironically, the fifth step in the process is most often reconnection, after which the process is doomed to repeat itself over and over again, since the causes of nonpayment have not been addressed.

In communities with large low-income populations, the rate of disconnections can rise to alarming proportions, especially during hard economic times and in the wake of rate increases. This draws negative attention to the utility and political pressure to back-off. The cycle of disconnection and reconnection also begins to erode the credibility of the threat. Moreover, the cost of collections can begin to rival the amount of money at stake. And, without doing something to address the causes of nonpayment, these costs must be viewed as perpetual.

Significantly, these costs must be spread across the other ratepayers in the customer base. In many places, there is embedded resistance—and, even statutory prohibition—against cross-subsidies between customers. This is used as an argument for sticking with conventional collections methods and refraining from customer payment assistance programs that may involve more deliberate cross-subsidies. However, there is a business case to be made for customer assistance programs (Colton 1991, Melbourne 2004), not only in the short-term, but in the long-term since the causes of nonpayment can be deliberately addressed.

In contrast, the strategies and practices that have evolved in utility customer assistance programs provide targeted relief for each of the four major categories of causative factors described above.

- Crisis conditions—Households facing crisis conditions need emergency money and time to get back on their feet.
- Affordability and/or money management problems—Where bills are simply not affordable, there are means of trying to make them more affordable. Where people need help with money management, there are means of providing such help.
- Elderly and disabled limitations—Assistance can be made available to these groups in every area—from the affordability of water bills to the practicality of paying them.
- Older housing with bad plumbing—Home audit and conservation retrofit programs offer ready technical solutions that have enduring value.

Table 6.1 presents a cross-walk that maps the major elements of customer assistance programs against these four major categories of causative factors. Reading down the four individual columns, it is possible to see how a targeted strategy for customers in each category can be configured. There are natural areas of overlap between the four categories. For example, elderly customers may be among those with higher than average bills as a result of older housing with bad plumbing. The areas of overlap merely indicate the need for a combination of strategies, targeting each area of causation.

The top three rows in Table 6.1 illustrate the importance of key support processes (IT/data analysis; communications, and personnel training) in targeting a customer assistance program. Community demographic data from the US Census and other sources can provide an overall profile of income distribution, age distribution, housing stock and other variables. Data from a utility's own customer information system (CIS) can be combined with data from social service agencies to provide a means of identifying low- or fixed-income customers that may benefit from certain types of assistance.

Utility communications efforts can be targeted to each of the four customer groups in order to promote awareness of advanced assistance programs offered by both the utility and other organizations within the community. Helping appropriate customer groups connect to sources of financial assistance before-the-fact will help keep them out of the utility collections process. It can also be very valuable to advertise the desirability of calling customer service to inquire about assistance without delay when payment troubles arise. Many customers are too intimidated by the collections process to call the utility, creating an important barrier to assistance.

Table 6.1
Mapping causes of nonpayment to elements of assistance programs

	Crisis (e.g., illness, job loss, family issues)	Affordability or money management problems	Older housing with bad plumbing	Elderly or disabled customer limitations
1. Analysis of customer data and other databases		Identify low-income accounts with recurring patterns	Identify low-income accounts with high water use	Identify low-income elderly and disabled customer accounts
2. Communications efforts	Promote awareness of crisis assistance programs	Promote social assistance programs and encourage customers to call for help	Promote awareness of conservation programs	Promote social assistance programs and encourage customers to call for help
3. Customer service training	First point of contact readiness	First point of contact readiness	First point of contact readiness	First point of contact readiness
4. Conservation programs			Audits and retrofits to reduce use	
5. Billing practices		Bill timing or averaging		
6. Bill discounts		Eligibility and discount formulas to improve affordability		Eligibility and discount formulas to improve affordability
7. Alternative rate structures			Mitigate negative impacts of conservation rates	Conservation or lifeline rates may be helpful
8. Prevention before-the-fact		Referral to other social assistance programs and/or financial counseling		Promote elderly and disabled programs and refer to other social assistance programs
9. Effective intervention after-the-fact	Notices or outbound calls with information about crisis assistance	Outbound calls to promote self cure, encourage customers to call for help, and offer easy payment methods		Outbound calls with information about elderly and disabled programs and provision of easy payment methods
10. Crisis assistance programs	Provision of financial assistance and/or payment deferral			
11. Deferred payment plans	Customized payment plans	Customized payment plans	Require audits and retrofits as part of payment plans	Customized payment plans
12. Minimizing recurrences		Referral to other social assistance programs and/or financial counseling	Audits and retrofits to reduce use	Referral to other social assistance programs and/or financial counseling

Training customer service personnel can also greatly enhance the effectiveness of a targeting strategy. Once a payment-troubled customer has placed a call to the customer service department, it is extremely important that the agent is sufficiently trained to know exactly which of the targeted strategies is relevant to the situation and how to activate it before the call ends. Agents assigned to make outbound phone calls to inquire about past due accounts need to be similarly trained across the entire menu of assistance options to produce a maximum effect from that first point of contact.

In the remainder of [Table 6.1](#), the major elements of customer assistance programs are arrayed and their logical intersections with the four major groups of causative factors are indicated. It is noteworthy that some of the practices that can be adopted to reduce the bills or to shrink the overdue caseload and arrearages intersect broadly and others intersect only narrowly. This accentuates the need for development of a targeted approach while at the same time emphasizes the need for a comprehensive set of remedies. One size clearly does not fit all aspects of the nonpayment problem. A targeted approach is necessarily a multifaceted approach that is capable of addressing all the most important causative factors.

The major elements of the business process model described in Chapter 2 are evident in [Table 6.1](#). In rows 4 to 7, the mix of practices designed to implement the “shrink the bills” strategy is shown to have varying levels of effectiveness on the four different categories of nonpayment. Similarly, the mix of practices intended to help implement the “shrink the overdue caseload and arrearages” strategy (rows 8 to 12) have differential effects on the four different categories of nonpayment problems. Taken together, however, it is possible to see how a comprehensive customer assistance program can provide a mix of practices that address all the needs of all four categories of nonpayment.

TARGETED OBJECTIVES FOR CUSTOMER ASSISTANCE PROGRAMS

The inadequacy of a one-size-fits-all approach to collections is nowhere more evident than in the measures typically used to evaluate its performance. Little can be learned about underlying events from tallying the total number of disconnections, the aggregate level of arrearages, or the percent of revenue that is uncollectible. In contrast, there is a lot that can be learned about the subgroups of customers that could be targeted by a utility’s customer assistance program. Community demographic data can be analyzed to assess the nature and extent of a utility’s low-income population as well as the extent of older housing. As discussed further in Chapter 20, some utilities have gone much farther and merged their customer data files with client lists of social service agencies in the region to actually identify low-income households for various purposes in implementing an assistance program. Elderly and disabled customers can be identified by the same means. Armed with an assessment of the number and nature of customer accounts within these vulnerable categories, it is possible to begin establishing program objectives for these specific target groups.

To complete the baseline assessment, a utility’s CIS can be queried to obtain an assessment of the number and type of overdue accounts and collections actions that are occurring within these target categories. Program objectives can then be established by estimating the effect that the strategies and individual practices of a customer assistance program can be expected to have on the collections outcomes in each of these targeted categories.

For example, what proportion of the total overdue caseload and arrearages is represented by “crisis conditions,” and how well are these being handled by the utility’s crisis assistance program? How many customers receive some form of crisis assistance from a utility program or external sources? How many crisis situations end in disconnections? How many end in payment plans?

Similarly, what proportion of the total overdue caseload and arrearages is represented by low-income customers or by elderly and disabled customers? How many of these accounts are referred to other social service agencies for allied forms of assistance? How many are offered assistance in water conservation? How many cases are resolved by disconnection? How many are reconnected? How many cases are resolved by payment plans?

By taking the problem apart into these specific categories, it is possible to formulate a much better appreciation of what is really going on that is causing the problems of nonpayment. It is then possible to devise targeted approaches to improving the outcomes within each category and establish measurable performance objectives with which to track program effectiveness within each category. This targeted approach is the preferred approach to continual improvement in implementation of customer assistance programs.

CHAPTER 7

SHRINK THE BILLS: CONSERVATION



Water conservation programs can help customers reduce their water consumption and lower their bills for water service. There are several factors, however, that must be considered in tailoring the design and implementation of conservation programs to target lower-income customers.

Initially, it should be recognized that lower-income households already tend to use less water on average than higher-income households. Reviews of several research studies in the US found that there is a positive relationship between income and water consumption (Vista Consulting Group 1996; Beecher, Pekelney, and Chesnutt 2001). The results are reported as *income elasticities* generally between 0.2 and 0.5, meaning

that a 10% increase in income was correlated with an increase in water consumption of between 2% and 5%. A recent study in Brazil found an income elasticity for water use of approximately 0.4 (Ruijs, Zimmermann, and van den Berg 2008). Similarly, an analysis of US Census data found that high-income households (\$100,000 income or more in 1999) paid 46% more for water and wastewater service, on average, than low-income households (\$10,000 income or less in 1999) (Rubin 2005).

Another study found that lower-income consumers are more likely to be motivated to conserve water by economic savings, as opposed to more abstract or idealistic notions of conserving resources for the public good (Hamilton 1983). Interestingly, that study found that while higher-income, better-educated households were more likely to agree that it was important to conserve water for environmental (as opposed to economic) reasons, they also were likely to use more water than lower-income, less-well-educated households.

Thus, a utility considering a conservation program targeted to lower-income customers must recognize that these consumers are unlikely to be the largest water users on the utility's system. However, lower-income households tend to have more people (Saunders et al. 1998). And, lower-income customers may not have installed modern water-efficient plumbing fixtures and appliances, which can significantly lower per capita water consumption (Beecher, Pekelney, and Chesnutt 2001). As a consequence, there could be opportunities for significant water savings in lower-income households. Moreover, in developing programs to encourage low-income consumers to reduce water consumption, it appears that utilities should place the emphasis on the cost savings to the customer, rather than on a more general environmental stewardship message.

Other publications explain in detail the various types of water conservation programs that can be implemented and that information will not be repeated here (Vickers 2001, AWWA 2006). Generally, it is useful to think in terms of the following types of programs:

- General education (information provided to all customers through bill inserts, mass mailings, brochures left in public places, Web sites, or media advertising)
- Targeted education (customer-specific information, such as showing the customer's consumption history on the bill, providing counseling, training community-based organizations (CBOs) that have direct contact with consumers)

- Rebates and coupons (providing customers or retailers with rebate forms or coupons for the purchase of water-saving fixtures, appliances, landscaping/gardening features, or services)
- Equipment (providing customers with flow restrictors, low-flow showerheads, toilet displacement bags, new plumbing fixtures)
- In-home assistance (conservation audits; leak detection; installation, repair, and retrofit)

Each of these types of conservation programs offers a broad range of specific design, implementation, and cost options. For example, education programs can range from providing static information (such as a brochure or Web site) to providing in-person consultations in the customer's home, with many options in between. Similarly, equipment and in-home assistance can be provided solely at the utility's expense, solely at the customer's expense, or through a wide variety of cost-sharing arrangements that could involve the utility, customer, manufacturer, and retailer.

When evaluating hardware-related efficiency programs for their possible usefulness to low-income customers, special consideration should be given to subsidized assistance. For example, rebate and coupon programs may not be effective for low-income customers because customers may not be able to afford the up-front cost of the plumbing fixture or appliance. In contrast, a program that provides a free fixture to eligible customers can be highly effective. As Beecher, Pekelney, and Chesnutt (2001) summarize, a program in Austin, Texas, to give free ultra low-flow toilets to eligible low-income customers achieved greater water savings at a lower cost per million gallons saved than a rebate program for higher-income consumers.

In a similar vein, programs that rely on in-home assistance are likely to be more successful in reaching low-income consumers than programs that expect the consumer to obtain their own equipment or services. An early program in Philadelphia, Pennsylvania, provided in-home water audits and repairs for low-income customers (Beecher 1994; Beecher, Pekelney, and Chesnutt 2001). The program was successful not only in reducing customers' water consumption, but also in improving their timely payment of water bills. An ambitious toilet replacement effort was also a large success for New York City (Beecher 1994).

Given the long-lasting effects of retrofits with water-efficient plumbing fixtures, there is a strong business case to be made for proactive and subsidized intervention to assist payment-troubled customers. On a lifecycle cost basis, the relatively modest cost of a one-time hardware fix might lower bills enough to break the cycle of repeated payment lapses and repeated collections costs in many low-income accounts, providing a positive payback to the utility. A gradient of proactive approaches is available to utilities, encompassing such possibilities as the following:

- Use the customer information system to identify accounts that have abnormally high household usage and are also located in low-income areas, or that are known to be low-income households from cross referencing with other social service client data systems. Target these accounts for tailored mailings to provide conservation information, retrofit coupons, and offers of in-home conservation assistance.
- Take advantage of the incidence of a missed payment as an opportunity for the utility to directly contact the customer by phone and offer a complete range of conservation assistance.

- Require a complete range of conservation assistance, including an in-home audit and subsidized repairs, as part of the conditions for establishing an extended payment plan to work out arrearages and avoid disconnection.

Many communities have already established various degrees of integration of their assistance efforts in water conservation and energy conservation. This is easier when the city provides both services, but most often it requires collaboration between utilities that are distinctly different organizations. Despite organizational hurdles, there is an extremely compelling business case to be made for integrating these activities as tightly as possible. By combining information resources, the targeting of low-income, payment-troubled customers that can derive the greatest benefits from conservation can be greatly enhanced. By combining field resources, a single in-home conservation audit and assistance program can share costs and produce magnified benefits by simultaneously shrinking the bills for water, wastewater, electricity, and heating.

Shrinking all the utility bills at once in a payment troubled household greatly enhances the durability of the solution. Water utilities have the most to gain from such collaboration because water bills—despite trends to the contrary discussed in Chapter 5—are still the least expensive. Some payment-troubled customers already flagged by energy utilities may not have missed a water bill yet, but may be candidates in the future. Thus, water utilities can obtain advance targeting insights from the collaboration with energy utilities, enabling them to implement targeted conservation assistance initiatives before-the-fact.

The Federally supported Low Income Heating and Energy Assistance Program (LIHEAP) has been implemented through networks of State social service agencies since the early 1970s. In addition to providing direct financial aid to low-income households, there is a parallel weatherization and conservation assistance program implemented by these experienced State networks that has incorporated a degree of water conservation in some instances. Further integration of local water utility efforts in conservation assistance with this very established energy program seems a clear avenue of best practice.

CHAPTER 8

SHRINK THE BILLS: BILLING PRACTICES



Clearly, a first priority in using billing practices to help payment-troubled customers is to eliminate all sources of error and inefficiency in billing practices that will otherwise exacerbate payment problems. Failing meters and flawed billing systems can add substantially to the difficulties faced by payment-troubled customers.

Estimating bills and back billing (that can result from metering errors or malfunctioning customer billing systems) can lead to billing problems that create serious concerns for low-income customers. Estimated bills and back billing can lead to a utility issuing a bill that is significantly higher than a typical bill. When this occurs, low-income customers may be unable to pay the entire bill on time. Some utilities—either voluntarily or because of State regulations—allow the customer to pay an unusual bill over an extended period of time. For example, in some jurisdictions when a customer is back billed for six months of consumption, the customer will be given the same amount of time (six months, in this example) that the billing period covers to pay the bill.

Moreover, the complications associated with resolving fouled metering and billing practices can present additional communications challenges for customer service personnel in working with payment-troubled customers who may have language, cultural, educational, mental, and physical disabilities that impair their capacity to comprehend and cope with such complexities. Of course, these issues are best avoided through efficient metering and billing practices.

Water utilities have found that some low-income customers are better able to afford to pay bills that are issued more frequently in smaller amounts, even though the total charges on an annual basis may be the same. Beecher (1994) and Saunders et al. (1998) report that customers with low incomes or fixed incomes prefer to receive bills monthly (rather than bimonthly or quarterly) and on the same day of the month. This facilitates the customer's ability to budget for the utility bill and generally improves the timeliness of payment. In some circumstances, the switch from bimonthly or quarterly billing to a monthly schedule can increase costs of meter reading and billing processes. While these costs are not trivial, and cannot be ignored, many water utilities have found the switch to a monthly billing cycle to be an essential foundation element of a comprehensive approach to improving affordability of water service and ameliorating payment problems in the customer base. One obvious strategy is to be mindful of the value of monthly billing in improving affordability when specifying needs for replacement investments in metering technology and billing software systems, thus folding part of the cost into normal replacement expenditure.

Providing monthly billing options helps many residential customers make payments toward their current bills for electric and natural gas utilities around the country. One additional practice that is prevalent within the energy industry is to allow for levelized budget billing. Levelized budget billing allows a customer to receive equal monthly bills. A variety of options exist on how to implement such programs. Some states provide for a 12-month budget billing

with any over/(under)collection being rolled into the next year. Other states provide for an 11-month levelized budget bill, with the twelfth month used as a “true-up” month.

Under a program adopted by the Tennessee State regulatory commission in 2005, customers that begin the winter heating season with current bills are automatically moved to a budget billing plan if they fall behind during the high cost winter months. They may choose to move off budget billing, but only once they have cleared their arrears. While water utilities obviously do not have the winter heating costs, they may have high cost months which budget billing can help levelize.

Beecher (1994) and Saunders et al. (1998) report similar applicability of budget billing programs in some circumstances where it is desirable to smooth out seasonal fluctuations in water utility bills. The major drawback to budget billing programs is that it weakens the price signal that customers receive during the peak demand season (Beecher 1994). If a utility finds that its low-income customers are not significantly contributing to seasonal peak demands, then the benefits of budget billing to customers can be obtained without affecting conservation goals. On the other hand, if budget billing is widely used by the customer base (Saunders et al. note that some utilities have 30–40% of their customers participating in budget billing programs), then such a program may be inconsistent with the utility’s seasonal conservation goals.

While levelized budget billing plans are offered to help make bills more predictable, other billing options can also be considered as well to help make bills fit into the cash flow constraints of constrained household budgets. For example, 11-month billing plans (allowing a customer to skip-a-month) allow customers to plan around months that are known to involve high nonutility expenses (e.g., back-to-school, holidays). Customers that receive fixed monthly income payments (e.g., Social Security) on a day of the month that does not “match” their billing date, and that, accordingly, have historically paid in-full-but-late every month, have been found to be well-served by a Pick-a-Date program (under which they can choose their billing date).

A special type of cash flow hurdle is often introduced at the very beginning of a new customer account relationship with the requirement of many utilities for new account creation fees and cash security deposits to secure bill payment. Factors that are used to establish the creditworthiness (or lack thereof) of a customer for purposes of requiring security deposits are variable from one utility to the next. Since low-income families tend to have to move more often (Colton 1995), they are more likely to be presented with these abnormal cash demands at a time of flux when it may contribute to the development of payment problems right from the start. There are, however, options that can help to facilitate bill payment. For example:

- Exempting low-income customers from the payment of new account fees or cash security deposits helps customers that may not be able to afford to pay such deposits in addition to their current bill. The State regulatory commissions of Minnesota and New Hampshire both exempt low-income customers from the payment of cash deposits.
- Accepting less than the maximum cash security deposit is another means of allowing low-income customers to secure their bill payment while not necessarily exhausting their ability to pay current bills.
- Accepting guarantees (or sureties) in lieu of posting a cash security deposit is one tool to secure payment without exhausting a customer’s cash that might be devoted to payment of current bills. Some utilities impose strict limits on who might be a guarantor.
- Encouraging the provision of a guarantee in lieu of a cash deposit by a social service agency that would otherwise provide cash to help pay a deposit is practiced in several

states. New Jersey, Minnesota, New Hampshire, Mississippi, and Oklahoma all allow community-based organizations to leverage limited financial resources by allowing such agencies to provide guarantees rather than cash security deposits.

CHAPTER 9

SHRINK THE BILLS: BILL DISCOUNTS



As described in Chapter 5, there is ample evidence that constrained budgets in low-income households force trade-offs between utility bills and other necessary expenditures that can affect the health and well-being of the family. This provides a basis for defining affordability. It is generally accepted that an unaffordable utility bill is one that produces these adverse trade-offs (Saunders et al. 1998, Hasson et al. 2007).

In the water and wastewater sector, there have been repeated attempts to further define this trade-off threshold in terms of a simple percentage of household income in order to provide a working rule of thumb to help focus efforts to address the issue (Saunders et al. 1998, Hasson et al. 2007). A rule of thumb has emerged which pegs the affordability threshold at 2% of median household income (MHI) for both water and wastewater service (4% combined). This has been widely used in national level analyses of the affordability of the US Environmental Protection Agency regulations. It has two serious flaws. First, it is just a guess as to where the trade-off threshold lies. Despite decades of debate, there has never been any social science research applied to validating 2% as an estimate of the trade-off threshold. Second, it is unlikely that 2% of MHI is the right rule of thumb to guide development of programs to address affordability concerns since MHI is roughly four times the income of families living on public assistance programs (Saunders et al. 1998).

The generally accepted measure of “being poor” in the US today indexes a household’s income to the “Federal Poverty Level” (FPL) published each year—generally in February by the HHS. The FPL looks at income in relation to household size. This measure recognizes that a three-person household with an annual income of \$6,000 is, in fact, “poorer” than a two-person household with an annual income of \$6,000. The Federal government establishes a uniform “Poverty Level” for the 48 contiguous states. Since 100% of the Poverty Level is generally considered to be too low to be a reasonable demarcation of “being poor,” other estimates range from 150 to 200% of the Poverty Level or more.

For example, a Colorado statute authorizes utilities to have assistance programs for customers with incomes up to 185% of the Poverty Level.

While the question of what income is “sufficiently high” to afford water service remains elusive, guidance is available from several sources for determination of what constitutes a “livable wage” or “self-sufficiency budget.”

- A calculation of self-sufficiency standards for about 20 states can be found at the World Wide Web site of Wider Opportunities for Women. <http://www.sixstrategies.org/resources/resources.cfm>.
- The Economic Policy Institute has an on-line calculator that allows the user to calculate a “basic family budget” by number of parents and children, State, and area within the State. http://www.epi.org/content.cfm/datazone_fambud_budget.

- The Center for Children in Poverty at Columbia University’s School of Health has an on-line “family resource simulator” that allows the user to determine net available resources for many, but not all, states given different assumptions about the State, location within the State, family structure, and number and age of children. <http://www.nccp.org/modeler/modeler.cgi>.

The design of customer assistance programs must proceed with some sense that there is a threshold level—measured by the monthly utility bill as a percentage of monthly income—at which adverse trade-offs occur. In any given month, there will be many “marginal” households with a bill-to-income ratio that is close to this threshold who will nonetheless pay their bills. Those that cannot pay the water bill are the ones that have clearly been pushed across the threshold. But it is important to stress that the larger group of “marginal” households are just as vulnerable to nonpayment the next month, or the month after that.

The strategic intent of a low-income bill discount program is to reduce the number of “marginal” households that are vulnerable to nonpayment by reducing the bill-to-income ratio for low-income customers across the board, thereby allowing many families to back away from the trade-off threshold and the risk of nonpayment. The primary advantage of a bill discount approach targeted to low-income households is that it addresses affordability concerns in a single action. It helps not only nonpaying customers, but potential nonpaying customers as well. By targeting the “marginal” households that are always at risk of nonpayment and moving them out of the marginal zone, it can help to break the cycle of repeated episodes of nonpayment and repeated disconnections and reconnections. The lost revenue can be offset to some degree by avoiding the perpetual customer service costs associated with this cycle (Colton 1991).

A cross-referencing of customer account data with community data on Federal government low-income assistance programs or with community demographic data should provide an indication of the proportion of the customer base that is comprised of households that lie within the “marginal” zone. Armed with this type of segmentation analysis, it is possible to develop a local assessment of the degree of discount that might be sufficient to produce the desired benefits of drastically reducing the overall payment-troubled caseload for the utility with a single administrative decision and action. If the first guess at the right level of discount is inadequate to produce the desired drop in the delinquent caseload, it can be adjusted as a matter of continual improvement. Such a procedure could in fact provide an empirical means of defining where the affordability threshold actually lies within a community. Such efforts have been summarized in case studies of programs in Seattle, Los Angeles, and Portland, Ore. (Saunders et al. 1998, Hasson 2002).

The primary barrier to employing a low-income discount strategy arises from the fact that offering any discount to the actual cost of service is considered out of bounds to many utility managers and governing boards strictly as a matter of principle. In many jurisdictions, it is prohibited by local or State laws. While cost-of-service ratemaking, avoidance of cross-subsidies between ratepayers, and equivalent treatment of ratepayers are time-honored principles in public utility theory, they are theoretical constructs that are intentionally blind to practical considerations that lie outside of ratemaking theory such as the real-world business problems posed to a utility by poverty. If the repetitious cycle of nonpayment, disconnections, and reconnections within the same “marginal” segment of the customer base is evident in a utility’s customer account data, then the only way to truly cure this embedded problem is to move them back from the affordability threshold to reduce the number of households that are marginalized.

Another potential complication that may arise in bill discount programs is an issue of equity between low-income households that pay a water bill for an individual residence versus low-income households that rent housing and do not pay directly for water. In situations where the water utility is a department of the city government, a bill discount program can appear unfair to half of the low-income population. Some cities have addressed this issue by providing the same dollar amount of discount as a credit on energy bills that, unlike water bills, are typically paid by renters. This only works, of course, when the city also runs the local energy utility. Other cities have tried simply mailing checks to low-income renters, but this involves an obvious administrative burden. A final complication which may arise if checks are provided to low-income renters is that some offsetting income adjustment provisions in other social assistance programs would adjust other payments accordingly and leave the target households no better off. As discussed in Chapter 1, the issues of equity for low-income tenants and of tenant rights in the situations created by nonpaying landlords deserve special attention and development of an entirely separate set of best business practices.

The main administrative task involved in a bill discount program is the determination of eligibility. The primary options for accomplishing this include:

- Meeting a particular income requirement (for example, income less than 150% of the FPL)
- Qualifying for an income-based assistance program (such as food stamps or discounted school lunches)

There are obvious advantages to determining eligibility via cross-matching customer account data systems with other client data systems of public assistance programs. When this is possible, the eligibility determination can be approached as an automated process whereby customers identified by the computer match are notified by mail that their bills will henceforth reflect the low-income discount.

Additional client data systems that are accessible within the public domain include those identifying elderly and disabled customers. All of the same principles of affordability thresholds often apply to customers with these characteristics when they appear in databases indicating the receipt of benefits from Social Security, Medicaid, and related programs. In fact, there are probably many more water utility bill discount programs for elderly and disabled customers than there are for low-income customers.

Other studies have done a commendable job of summarizing the types of bill discounts that some utilities use to help low-income customers shrink their bills (Beecher 1994, Saunders et al. 1998, AWWA 2000). Two major types of bill discounts have been used by water utilities:

- *Discount on total bill.* Some utilities offer a percentage discount on the total bill of a low-income customer. Examples have bracketed a wide range, varying from a 20 to 50% discount off the total bill.
- *Discount a particular portion of bill.* Some utilities offer a discounted customer (or meter) charge to qualifying customers (for example, low-income customers pay a customer charge that is 50% lower than the typical customer charge). Some have in fact waived the customer charge altogether. Other utilities discount the consumption charge for a certain quantity of water for qualifying customers (for example, the first 5,000 gallons of water may be provided to eligible customers at a price that is 20% lower than

the typical charge). In areas where water scarcity and conservation is a particular concern, there is a preference for discounting the fixed customer charge and leaving the price signal of the variable usage charge intact.

The type and level of bill discount to offer is a decision that can be helpfully informed by a detailed segmentation of customer account data for the target group of customers. Analysis of a utility's experience with repeat patterns of nonpayment and disconnections will help to judge whether it is more efficient to have a narrow definition of eligibility coupled with a generous discount or a broad definition of eligibility coupled with a smaller discount. An additional alternative is the development of a tiered discount structure that attempts to have it both ways, albeit with additional costs in administering eligibility.

One last type of bill discount program is called a percentage of income payment plan (PIPP). Some energy utilities have adopted these programs to set the amount of the total bill for low-income customers to be a set percentage of the customer's income. For example, a utility may set the bill for a nonheating customer to be equal to 2% of the customer's income and the bill for a heating customer to be 7% of the customer's income. A PIPP frequently carries with it a requirement for the customer to participate in a conservation program and to keep its consumption within a predefined range. The one-on-one administrative costs of this approach are certainly much steeper and although it is often discussed as a discount program, it has more of the administrative characteristics of managing an extended payment plan (discussed in Chapter 14). It could perhaps be rationalized as a type of continuing after care program for customers who have successfully completed extended payment plans to retire arrearages.

CHAPTER 10

SHRINK THE BILLS: ALTERNATIVE RATE STRUCTURES



The selection of an appropriate rate structure for a utility involves many considerations. Chief among them, of course, is the rate structure's ability to provide the utility with the revenue the utility requires to operate. Other considerations, however, affect the selection of a rate structure. These include: the diversity of the customer base, the seasonality of consumption and costs, the sensitivity of customer demand to changes in price, risks to the utility's cash flows from abnormal weather conditions, the fairness of rates, and the impact on customers of dramatic changes in the rate structure (Beecher, Landers, and Mann 1990; AWWA 2000). From the specific perspective of enhancing the affordability of water bills to low-income

households, the fact that families in such households are larger than average—and in some instances much larger than average—introduces additional complications in considering alternative rate designs (Saunders et al. 1998).

Alternative rate structures may provide an attractive means of shrinking the bills to payment troubled households in circumstances where it is unlawful or politically unacceptable to offer discounted water service as discussed in Chapter 9. With rate structure alternatives, more affordable bills are devised through pricing formulas that are applied in the same manner in computing all customer bills. So, under rate structure alternatives, payment-troubled customers do not receive lower bills because of cross subsidy from other customers, but rather from pricing formulas that are simply more favorable to their circumstances and consumption characteristics. A drawback of this approach arises from the fact that it is always difficult to devise a single pricing formula that will work best for all of the diverse customer circumstances that exist. Rate structure alternatives can be generally helpful to low income customers, but may not have as great an effect as bill discounts and may also produce occasional unintended adverse effects on a segment of the low income customer base having especially large families (Saunders et al. 1998). When evaluating the potential of rate structure alternatives to reduce bills for low-income customers, there are four options that a utility might consider:

- Can the fixed charge (also known as a meter charge or customer charge), minimum bill, or minimum usage allowance be reduced or eliminated?
- Is it reasonable, and lawful, to consider a lifeline rate (that is, a rate structure that includes a quantity of water deemed necessary for basic human needs at a much lower price than more discretionary water consumption)?
- Would a form of conservation pricing, such as seasonal rates or increasing block rates, help low-income customers and improve efficiency?
- Are customer-specific rates (also known as a water budget) appropriate and feasible?

FIXED CHARGE, MINIMUM BILL, OR MINIMUM USAGE ALLOWANCE

Many water utilities' rate structures include a fixed charge (usually called a customer charge or meter charge) that cannot be avoided. Some water utilities use a minimum bill or a minimum usage allowance instead of a customer charge.

A minimum bill charges a customer for a certain amount of water each month at the typical consumption rate. For example, a utility might charge \$3.00 per 1,000 gallons of water and bill a customer for at least 2,000 gallons of water (\$6.00) each month, even if the customer uses less water than the minimum. A minimum bill has the same effect as a fixed charge: it charges the customer a certain amount each month that cannot be avoided through usage reductions or changes in circumstances.

A minimum usage allowance is similar to a minimum bill, but is usually presented to the customer differently. Usually a utility with a minimum usage allowance will have a customer charge, but the customer charge will include a certain amount of water. For example, the customer charge might be \$10.00 per month, which includes the first 2,000 gallons of water. With a minimum usage allowance, the customer charge is usually higher than the amount the utility would charge just for the water included in the allowance. In this example, the utility might charge \$3.00 per 1,000 gallons, but have a \$10.00 customer charge that includes 2,000 gallons. Thus, in effect, the "pure" customer charge is \$4.00 per month, but the customer is required to buy at least 2,000 gallons (another \$6.00) to bring the unavoidable portion of the bill up to \$10.00.

From the perspective of low-income customers, there is little difference between a customer charge, a minimum bill, and a minimum usage allowance. All three approaches make a portion of the bill—sometimes a substantial portion—unavoidable, regardless of efforts the customer takes to use water more efficiently, eliminate leaks, and so on. For ease of reference, each of these billing mechanisms will be referred to as a "fixed charge" in the following discussion.

The higher the fixed charge, the less control a customer has over his or her bill. That is, with a high fixed charge the customer is not able to reduce the bill significantly through usage reduction. A high fixed charge can place a burden on those low-income customers that are using water primarily to meet basic human needs. Beecher, Pekelney, and Chesnutt (2001) found that shifting costs from the fixed charge to the variable charge increases the incentive to conserve on outdoor or discretionary water use while also helping to address affordability concerns. Thus, reduction or removal of the fixed charge can be beneficial to conservation programs for a utility that is in a very supply-constrained part of the country. By shifting the recovery of fixed costs to the consumption charge, the fixed costs are recovered in a manner that is more favorable to low-income households since they can lower their bills somewhat through lower consumption. That a higher proportion of the fixed costs may be recovered from other users instead is a justifiable trade-off in an area where sharpening the pricing incentive for conservation is also an objective.

Reduction of fixed charges may also be supported on the basis of fairer cost allocation in areas where conservation objectives are not such a factor. Utilities' fixed charges are usually based on the assumption that the basic cost to connect a customer of a given size is the same. Typically, the utility will calculate the customer charge for an average residential customer based on the cost of providing a 3/4-inch service line and a 5/8-inch meter, then add the average cost of meter reading, billing, call center operations, and other customer service functions. Customers

with larger meters pay proportionately higher customer charges to reflect the greater cost and capacity of larger meters and service lines (AWWA 2000).

For larger utilities, however, this averaging approach can mask important differences in the cost of serving low-income customers. It is not unusual for low-income customers to occupy older housing units where the utility's investment in meters and service lines might be largely or fully depreciated. Further, where low-income customers are located in more densely populated neighborhoods (that is, more customers per mile), meter reading costs can be significantly lower than they are for less densely populated areas. A study by The Ascent Group (2005) of energy and water utilities shows that in urban areas utilities read at least 450 meters per person-day. In contrast, in suburban areas, they read between 250 and 450 meters per person-day, while in rural areas the rate is less than 250 meters per person-day. Importantly, the average time to read a meter route is about the same (5.5 to 6.0 hours) in each of these areas. In other words, reading meters in densely populated areas is far more efficient than reading them in less densely populated areas. Similar results are reflected in a study by the same researchers that was limited to water utilities (Patrick and Kozlosky 2006).

If a particular utility's cost structure also reflects these differences (for example, if a meter reader in a low-income neighborhood can read twice as many meters as a meter reader in a more affluent, less densely populated neighborhood), then the utility could consider having a cost-based customer charge that is lower for customers in densely populated neighborhoods.

Many utilities are understandably concerned about the stability of their revenues and regard having a relatively large fixed charge as a prudent means of ensuring stable cash flow. However, there are indications that collecting a lower percentage of revenue through the fixed charge might not have a significant effect on the utility's overall revenue stream. Michelsen, McGuckin, and Stumpf (1998) concluded that—given the overall price inelasticity of demand—utilities that decrease their service charge and implement higher commodity charges (marginal prices) are unlikely to experience insufficient annual revenue with the appropriate increase in price. Even where a potential revenue loss is a concern, other research has shown how utilities can manage the risk of potential revenue instability that can result from lessening their reliance on fixed charges (Chesnutt et al. 1995).

LIFELINE RATES

Lifeline rates are set to provide a low price for an initial block of water consumption that is deemed essential for basic human needs. After the initial (“lifeline”) block of consumption, the price per 1,000 gallons increases, sometimes significantly, so that the utility can recover its full cost of service.

In practice, lifeline rates may not look much different from conservation rates or inclining block rates. The major difference is that the “lifeline” block may be priced below the marginal cost of service in recognition of the public health need to ensure that a minimum quantity of water is available to all consumers. This may lead to the next block of consumption being priced above cost so that the utility remains whole. Normally, differentials between conservation rate blocks should be based on the increasing cost of providing service during peak periods.

The major concern with lifeline rates is that it can be an imprecise way to ensure affordable service to customers in need. Water consumption is not perfectly correlated with income; some low-income households use a lot of water (particularly if there are a greater-than-average number of people in the household or if plumbing fixtures are old and inefficient) and

some high-income households use comparatively little water (for example, a wealthy couple with homes in several different cities). Urban usage is generally lower than suburban usage, with the lowest usage level being low-income families in urban areas and the highest usage level being high-income families in suburban areas (Saunders et al. 1998).

Lifeline rates have been used by some electric utilities since the 1970s and some water utilities may have rates with the characteristics of lifeline rates. Before deciding on a lifeline rate, however, a utility should study its customer-specific consumption data and attempt to determine the likely impact of a new rate design on the customers whose bills it hopes to affect. For example, if a utility's low-income population primarily consists of one- or two-person elderly households, then a lifeline rate might be very effective in lowering the bills of the target population. If, in contrast, the low-income customers of concern are primarily large families where children and a caregiver are at home much of the day (leading to higher-than-average water consumption), then it is unlikely that a lifeline rate would result in a meaningful reduction in low-income customers' bills.

CONSERVATION PRICING

Many utilities, particularly those in drought-prone areas, are adopting conservation-oriented rate structures. Generally, conservation rates can be defined as a rate structure that encourages efficient water use and discourages waste by ensuring that customer bills communicate the full cost of providing water services including the cost of new supplies (Chesnutt et al. 1997). Typical forms of conservation pricing include increasing block rates (charging more per 1,000 gallons as a customer uses more water) and seasonal rates (charging higher prices in the summer—when more costly supplies must be used to meet peak demand—than in the winter).

Depending on customer characteristics, conservation pricing could have the subsidiary benefit of reducing bills for low-income customers. This is particularly the case where low-income customers in a community tend to have smaller lot sizes and have smaller increases in consumption during the peak season. Seasonal rates can have a negative effect on those customers that exhibit relatively high peak-to-average demand characteristics. Customers who exhibit relatively low peak-to-average demand characteristics during the peak season may see a reduction in their water bills (AWWA 2000).

The selection and implementation of a conservation-oriented rate design will depend on numerous factors, not the least of which are the rate of growth in demand for water and the cost of obtaining additional water supplies. When such a rate change is being considered, however, the impact on customers—and particularly low-income customers—also should be evaluated. In many instances, it is likely that a conservation-oriented rate structure may have the additional benefit of reducing bills (or at least making them lower than they would be otherwise) for lower-income customers.

WATER BUDGETS

Within the past few years, a new ratemaking approach has evolved. Variously known as tailored rates, customer-specific rates, or water budgets, the methodology combines inclining block (conservation) rates with customer-specific consumption levels in each block (Teodoro 2002; Mayer et al. 2008a, 2008b) For example, a typical increasing block rate might contain

three consumption blocks: (1) the first 2,000 gallons, (2) the next 8,000 gallons, and (3) all consumption over 10,000 gallons; with the rate per 1,000 gallons in each block being higher than the block before.

A water budget, however, would not set the same consumption limits in each block for every customer. Instead, a three-block water budget rate might be as follows: (1) base usage based on indoor consumption, (2) peak usage based on typical outdoor consumption, and (3) excess usage. The rates would still increase with each block, but the amount of consumption included in the block would vary for each customer.

Needless to say, implementing water budget rates requires a sophisticated billing system and usually must be supplemented with data that a utility does not normally collect (such as the number of people in the household or the square footage of the property). Under the right circumstances, water budgets can be an effective tool for encouraging consumers to use water efficiently.

While it has not been explicitly studied yet, water budgets may prove to be an effective tool to ensure the affordability of service to low-income households. The water budget should be established to recognize the essential needs of the household in the first (lowest priced) block. This would be based on family size, the age of the housing unit, as well as other factors, so that the deficiency of lifeline rates with regard to large, low-income families would be mitigated. Further, if the low-income household lives in a more densely populated neighborhood with smaller lot sizes, the water budget would take that into account as well.

CHAPTER 11

SHRINK THE OVERDUE CASELOAD AND ARREARAGES: PREVENTION BEFORE THE FACT



Connecting payment-troubled customers with public assistance programs helps supplement household resources for low-income customers, thus improving bill payment patterns. Some low-income assistance programs have specific components that will take home utility bills into account. When low-income customers owe the utility money, it often makes sense to promote their enrollment in particular social assistance programs.

One key to promoting participation in various public assistance programs as a mechanism for facilitating bill payment by low-income customers involves the use of appropriate outreach mechanisms. The benefits of such facilitation forms the basis of the Pennsylvania Customer Assistance and Referral Evaluation System (CARES) programs. Through these mandated programs, regulated electric and natural gas utilities provide outreach for benefit programs ranging from those that directly support bill payments (e.g., LIHEAP, local fuel funds), to those that merely supplement

overall household resources (e.g., telephone lifeline, food stamps).

The Philadelphia Water Services Department exercises a wide-ranging and flexible program working in collaboration with the Energy Coordinating Agency (ECA), which, in turn, works through contracts with a citywide network of Neighborhood Energy Centers (Beecher 1994). The ECA believes its relational database (implemented and paid for by the State of Pennsylvania) has helped overcome the administrative constraints and access issues that keep people from signing up for assistance. The database contains a cross-section of services at the same delivery site. With a single, coordinated entry, applicants are accepted into any other program with Federal/State funding. Customers are required to bring all bills and counselors can then develop customized solutions to the overall picture. In addition, Philadelphia Water informs its customers about assistance programs through many channels, including ethnic media.

As discussed further in Chapters 19, 20, and 21, the integrated use of database resources and communications strategies can form a very effective part of an overall approach to customer assistance. By far the best way to alleviate bill payment problems is prevention before-the-fact—making bills more affordable to more households before they are issued. The following major social assistance programs should be considered in a utility’s efforts to integrate its assistance efforts with allied initiatives.

THE EARNED INCOME TAX CREDIT

The Earned Income Tax Credit (EITC) is considered by most policymakers to be the country’s largest anti-poverty program. The EITC provides a refundable tax credit to income-eligible households with earned income in any given tax year. A tax credit that is “refundable”

means that a household receives cash from the Federal government, whether or not the household owes taxes. The EITC, in other words, can put cash in a customer's pocket, and not merely act as a credit toward reducing a tax bill.

The average EITC benefit nationwide exceeds \$2,000. In addition, taxpayers may claim the EITC for up to three years in arrears. In order to receive the EITC, however, a household must file a tax return. Water utilities can play an important role not only in encouraging households to claim their EITC, but in promoting the free tax preparation clinics that are available to help households prepare and file their tax returns.

The EITC is particularly important for public utilities. Research by the Internal Revenue Service (IRS) finds that most households use their EITC, at least in part, to pay everyday household bills. Indeed, the IRS found that more than 30% of EITC recipients use the cash they receive to pay overdue utility bills.

EITC credits generally come at precisely the time of year when high home heating costs may affect the payment of all household utility bills, whether they be heating, electricity, or water bills. Encouraging households to claim their EITC can be expected to generate increased payments to the water utility and a reduced incidence and level of arrears.

THE FEDERAL FOOD STAMP PROGRAM

The Federal Food Stamp program is an important social assistance program for utilities to be familiar with. The Food Stamp program provides supplemental nutrition resources to households with income at or below 135% of the Federal Poverty Level (FPL). Participation in the Food Stamp program is not based on gross household income, but rather on "countable income." Countable income involves making certain income deductions specified by Federal law, both in determining eligibility for the Food Stamp program and in determining the level of food stamp benefits a household may receive.

One deduction to be considered by the Food Stamp program involves the Excess Shelter Deduction. The Excess Shelter Deduction will remove from income—up to a prescribed maximum for nonelderly households—those dollars of shelter costs that exceed 50% of a household's income. The Food Stamp program defines "shelter costs" to include rent/mortgage plus all utilities (e.g., home energy, water/sewer, telephone, trash collection). If, for example, a household has shelter costs of \$4,000 and an annual income of \$7,000, the Food Stamp program will assign a countable income of \$6,500 to the household (not considering any other income deduction). Thus, the Excess Shelter Deduction equals $\$4,000 - (\$7,000 \times 0.50) = \$500$.

As a rule-of-thumb, each \$3 reduction in income will result in a \$2 increase in food stamp benefits, thus freeing up household resources to pay for home utility bills.

FEDERAL SCHOOL NUTRITION PROGRAMS

Promoting participation in Federal school nutrition programs addresses one of the primary financial conflicts that face low-income households having trouble with their utility bill payments. One study of payment-troubled, low-income Georgia utility customers found that these customers identified "kid-related food expenses" as one of the primary conflicts with utility bill payments. Not only did the program respond by promoting enrollment in the Food Stamp program, but by promoting enrollment in the Free and Reduced School Lunch/School Breakfast program as well.

A lesser-known, but even more critical, Federal nutrition program is the Summer Food Service Program (SFSP). The SFSP allows programs to provide two meals (breakfast/lunch or lunch/dinner) or one meal and a snack each day to program participants. The SFSP operates during the nonschool months of the year in which low-income households no longer have access to the School Lunch/School Breakfast program. While providing a critical household income supplement during the summer months, the SFSP has a fraction of the enrollment of the school meals program. Enrolling in a SFSP can free up hundreds of dollars each month for households with children, money that will accordingly be available to pay the household's water bill.

THE LOW INCOME HOME ENERGY ASSISTANCE PROGRAM

LIHEAP is a Federally funded block grant program directed toward providing heating and/or cooling assistance to income-eligible households. LIHEAP provides seasonal assistance toward households whose eligibility is defined each year by the State LIHEAP agency. The State LIHEAP agency is typically located and/or administered by the State social services agency or the State housing agency. By Federal law, eligibility may not be *lower* than 110% of the FPL or *higher* than 60% of State median income.

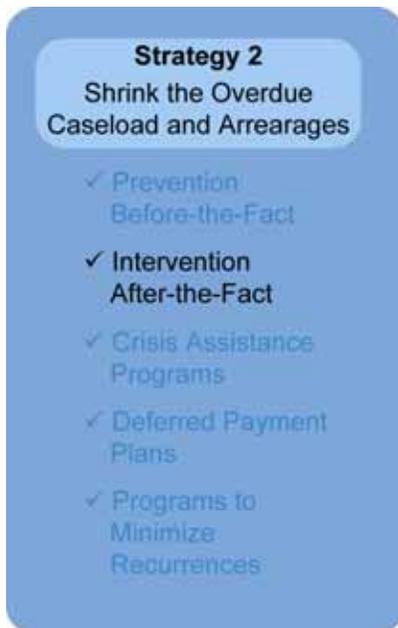
LIHEAP benefits are divided into two components, either or both of which can be delivered by the State. On the one hand, a State may deliver “basic” energy assistance benefits. These dollars, generally distributed on a one-time lump-sum basis, are intended to help improve the underlying affordability of home energy service. Basic benefits are not intended to be distributed to pay for home electric service unless electricity is used for heating or cooling (in states where LIHEAP aid can be used for cooling costs).

On the other hand, a State may deliver “crisis” energy assistance benefits. By law, a State must set aside a “reasonable amount” of its total LIHEAP funding to provide crisis assistance. The “reasonableness” of the crisis set-aside is left to the discretion of the State. A “crisis” is defined by most states to involve a pending or actual termination of utility service, or a reduction in the available supply of a bulk fuel (e.g., fuel oil) that would threaten the ability of the household to continuing heating or cooling the home. Crisis benefits are generally limited to an amount that is both necessary *and* sufficient to resolve the crisis.

LIHEAP dollars may not be used to pay water bills or to resolve shutoff situations involving the water utility, unless water is needed for the home heating or cooling system to function.

CHAPTER 12

SHRINK THE OVERDUE CASELOAD AND ARREARAGES: INTERVENTION AFTER-THE-FACT



TARGETED INTERVENTIONS

The identification and tracking of potentially payment-troubled customers can be routinely pursued by water utilities as a strategic means of designing the most effective approaches to intervention once an incident of nonpayment has occurred. This approach stands in stark contrast to a “one-size-fits-all” approach employed by many utilities. Many utilities do not know who their delinquent customers are and treat them all the same way. Existing utility data systems, however, can be used to identify low-income customers. Utilities can develop the capacity to record and access that information on a regular basis.

The Pennsylvania Public Utility Commission (PUC), for example, has implemented a process that requires regulated utilities to track their “confirmed low-income customers” as part of their basic customer service responsibilities. In recommending this identification and tracking process, the Pennsylvania PUC reasoned that the identification of potentially

payment-troubled customers is important in that it gives companies the opportunity to reduce payment problems by helping eligible customers receive assistance from public agencies, private agencies, or company programs.

The Pennsylvania program noted that any time there is contact between the utility and a customer, there is an opportunity for the utility to identify the potentially payment-troubled status of the customer. Such contacts include, for example, when a customer first applies for service, when a customer calls with an inquiry or to register a complaint, or when a customer contacts the utility with a payment problem. According to the Pennsylvania PUC: “During these contacts, utilities should ask customers about their primary source of income and/or participation in programs such as energy assistance, unemployment, welfare etc. In this way, utilities can obtain information that can help to determine whether a customer is potentially payment troubled.”

The Pennsylvania PUC noted that the following components go into a tracking and referral system.

- The *identification* of low-income customers
- Recording and updating information on low-income customers
- Allowing customer service representatives (CSRs) sufficient access to retrieve information on low-income customers

This approach ultimately led the Pennsylvania PUC to adopt guidelines urging utilities to identify low-income customers “by all available means, particularly during contacts with customers.” Each utility should specifically ask customers if they are interested in receiving information about help that may be available to pay utility bills.

The Pennsylvania PUC noted finally that “collection staff should be particularly sensitive to this problem when customers call to make payment arrangements.” Most utilities require their staff to consider prescribed factors in making payment plans, including “ability to pay.” The PUC reported that “this provides an opportunity to review the customer’s income and determine whether the customer is at risk.” For customers who are usually unwilling to provide information regarding their income, an opportunity to avoid the termination of their service may make them willing to share this information with the company.”

A best practice intervention strategy for payment-troubled water customers has as its fundamental objective not merely the recognition of a payment-troubled customer, but the recognition of certain attributes of that customer useful for purposes of targeting an appropriate utility response. An early identification program builds on a customer segmentation analysis, which in turn, counsels that not all instances of nonpayment could, or should, be treated alike. A prompt and effective resolution of potential payment troubles depends upon appropriately characterizing the nature of the difficulty, the ability of the customer to respond, and thus the appropriate utility response.

In this light, implementing a tracking system involves more than simply recognizing that customers have failed to pay a bill. Instead, it means:

- Identifying which payment-troubled customers are likely to need public assistance (or bill payment assistance)
- Identifying which payment-troubled customers have diverged from long-standing *good* payment patterns, indicating a possible family crisis (illness, job loss, etc.) that merits special treatment
- Identifying which payment-troubled customers might need special services, such as targeted usage reduction
- Identifying which payment-troubled customers may pose particular vulnerabilities (e.g., aged, disabled)

Early identification of these patterns requires the ability to record and archive information about customers, along with the ability to retrieve and use that information. An effective intervention program involves the collection and use of data as much as anything. The retrieval of information should be able to occur either in a report designed to guide outbound customer contacts or on a screen during an in-bound customer contact. Through new service applications, through the receipt of public and private bill payment assistance, and through other customer contacts, a utility can derive information about a customer that can not only help to address current bill payment troubles, but can help to prevent or respond to prospective bill payment troubles. Customer contacts can involve field collection contacts as well as either in-bound or out-bound telephone contacts. To be useful, however, the information must not only be archived as part of a utility’s permanent computer file, but must be instantly retrievable and available during a customer contact.

Creating the ability to access information on a customer’s ability to pay is only helpful to the extent that a utility also employs a thoughtfully targeted strategy of interventions and programs. Referrals must be targeted and carried through to completion in order to be effective. For example, referrals of low-income customers to public assistance programs, referrals of high-use customers to agencies delivering conservation services, and referrals of vulnerable customers to agencies on aging or children’s services agencies depend upon the utility knowing what the

relevant agencies are and how to contact them. According to the Pennsylvania Bureau of Consumer Services, for example, a utility needs more than information about such programs—it also needs to establish “positive linkages” with those agencies so that referrals will more likely yield actual connections to beneficial programs.

EFFECTIVE VS. INEFFECTIVE INTERVENTIONS

Sorting out truly payment-troubled customers not only enables a targeted response to their unique circumstances, it also identifies the portion of late payers that are not so encumbered for intervention with a more conventional collections approach. Not only is it important to get this sorting process right, it is also important to be able to get it right on the first try. It is well established that the first point of contact with a potentially payment-troubled customer is an opportunity to make a significant difference in all subsequent outcomes—if the CSR is adequately prepared and supported with the right data resources.

LATE FEES AND CREDIT SCORING

Many consumer advocates believe that the imposition of late payment charges impedes rather than improves the ability of low-income consumers to make payments. It is hard to argue with the reasoning: if a low-income household is late in paying a utility bill, there is probably an affordability issue and a late fee will not make the outstanding bill more affordable. By the same token, it is ineffectual to report a late payment to a credit agency for a customer that does not have a credit card and therefore has no concern for their credit score. Several states have addressed the issue of avoiding the payment barrier created by late fees by selectively restricting the imposition of late fees. Ohio, Minnesota, New Hampshire, and Oregon all exempt low-income customers (defined in different ways by different states) from the payment of late payment charges. Oregon limits late fees to arrears that are either greater than \$200 or older than two months. Wisconsin, Kentucky, and South Dakota all exempt arrears that are subject to deferred payment arrangements (so long as payments on the arrangements are current) from the payment of late fees.

A serious alternative to the imposition of late fees is the empowerment of CSRs to accept a simple “promise to pay.” Conceivably a large proportion of bills that are not paid on time represent nothing more than a short-term problem of budget balancing. Most people who promise to pay by a certain date will keep their promise. This provides an easily administered alternative to the front-end of the assistance process that could also open up other opportunities to offer additional forms of assistance while the customer is still on the telephone. Utility data systems should provide sufficient tracking information to enable CSRs to identify repeat instances of payment promises that might warrant additional forms of assistance.

OUTBOUND REMINDERS

“Soft-core dunning,” a term in the collection industry that refers to a gentle reminder to customers to pay their bills, has a place in the utility industry. According to the Pennsylvania PUC, the goal of soft-core dunning is to encourage customers who do not have financial difficulties to “self-cure” and pay in a timely manner. This approach takes collection practices in unregulated industries as its model. This is a method to be used against casual or “forgetful”

nonpayment. The philosophy behind this approach is that by eliminating from the collections workload those customers who can easily be persuaded to pay, there will be more resources available to concentrate on serious payment problems.

“Soft core” dunning is a term originated to describe the sending of low pressure reminder notices to customers who have an arrearage which is not serious enough to warrant the threat of termination. The logic behind soft-core dunning is that many customers delay making payments because of competing demands on their financial resources or because they are forgetful or careless. A politely but firmly worded reminder, sent separately from the bill, will prompt these customers to pay.

While soft-core dunning has its place, it has its limitations as well. The Pennsylvania PUC noted that while some utilities had established “very elaborate, sophisticated soft core dunning measures,” others “simply print payment reminder message on bills.”

This practice of sending “soft core dunning messages to past due customers regardless of their income levels or their outstanding balances” does not constitute the effective use of reminder notices as a collection practice. The intent of the Pennsylvania PUC was not to generate countless, meaningless contacts to all overdue customers. Refined soft-core dunning techniques, customized to the particular customer population to which they are directed, can make such activities an effective, and cost-effective, collection practice.

Another practice involves the placement of outbound telephone reminders. Here again, the practices are best tailored to the target audiences. A low-cost, automated telephone message may serve the purpose of inducing “self-cure” among customers who can afford to pay. But a utility that has the data systems with which to identify low-income or other targeted subgroups of customers among the late accounts, has the opportunity to place in-person outbound calls that can be used to gain more information and offer more forms of assistance—before arrearages begin to mount.

SHUTOFF NOTICES

Utility shutoff notices, and the number of service terminations for nonpayment, are generally not correlated to the enhanced collection of unpaid bills. As the Pennsylvania PUC noted upon its completion of a multiyear study of controlling uncollectible accounts, neither the volume of termination notices sent nor the number of service terminations completed was significantly related to collections performance in that State.

From this perspective, the use of service terminations should be a final resort to help stop the loss of money occurring because the company is providing service to a customer from whom payment is not forthcoming. Accordingly, the use of service disconnections is not a collection device, but rather a mechanism to offer protection to the utility.

Having recognized that truism, water utilities should be careful not to provide too many shutoff notices to their accounts in arrears. Aside from interfering with the long-term effectiveness of collection practices, legal problems exist, also, with exercising a routine threat of service termination for nonpayment that is not backed up by an actual current intent to disconnect service at the time the threat is made.

One Federal court, for example, found that issuing shutoff notices when the company had no intent to follow-up with the actual disconnection of service failed to comply with regulatory requirements that shutoff notices be “truly informative” and that they be given “at a meaningful time.” Referring to such notices as a “wolf kind of notice”—and providing a detailed recounting

of the parable of the boy who cried wolf too often—the court said the obligation is on a utility to provide a “meaningful notice” that applies to the specific customer to whom it is issued and will be followed by some action.

It is not uncommon for State regulators to prohibit actions that indicate an “over-noticing” of shutoffs. In Illinois, for example, utilities may not issue multiple consecutive shutoff notices that are not followed up by the actual disconnection of service. Pennsylvania prohibits the issuance of a shutoff notice exclusively as a collection device rather than as a warning of an imminent pending disconnection of service. Other State statutes have broader consumer protection provisions that prohibit issuing a threat to take a collection action that is not actually planned at the time the threat is made. Water utilities should adopt similar internal guidelines to prevent the over-use of disconnect notices.

Water utilities would be well-served to sharpen the criteria they use for issuing notices of disconnection of service for nonpayment. Water utilities often send far more notices warning of the disconnection of service for nonpayment than they are either willing or able to actually implement. Unfortunately, when a utility consistently threatens the disconnection of service if payment of an outstanding bill is not made by a certain date, with no follow-through on that warning, customers eventually learn that the notices of disconnection are a false threat that can be safely ignored without consequence.

The problem with issuing disconnect notices that do not lead to the disconnection of service is that the notices eventually destroy the efficacy of their “message” that “consequences will flow if you do not make a payment.” Indeed, “over-noticing” customers may lead to an increase in the number of service disconnections. Since some resource-constrained customers will leave payment until the last possible moment, as measured by the imminent disconnection of service, a series of shutoff notices that do not lead to disconnection may prompt customers to ignore notices. There is no way for a customer to tell the difference between a notice issued when the utility “really means it, this time” from one that is not issued under such circumstances.

EASE OF PAYMENT

Particularly as utilities close neighborhood customer service centers, there has been an increased reliance on community “pay stations” as a mechanism to permit customers to make cash payments toward their utility bills without the need to travel to a central office. A study by Pacific Gas and Electric Company found that three out of five customers who paid their bills in person had incomes of less than \$35,000. Nationwide, nearly one-in-four utility bill payments are made in person. In-person bill payment is growing at 5% a year. To avoid incurring fees for payments by credit card to pay by telephone, or to purchase a bank money order or check to pay by mail, these customers need a cash payment mechanism that exists in the community. To provide such service, utilities contract for “authorized bill payment centers” in the community.

According to groups such as the National Consumer Law Center, utilities should avoid using payday loan stores as authorized payment centers, where ultra-high-cost loans are marketed and transacted. Payday loans provide small advances of money against a customer’s next paycheck. While limited by law in many states to a few hundred or a few thousand dollars, customers needing instant cash to pay bills such as an overdue utility bill frequently take out multiple loans, or rollover existing loans, thus missing the State-provided consumer protection.

Payment-troubled customers have an even greater tendency to make in-person bill payments. Customers facing a pending disconnection of service, for example, need an assurance

that the bill payment has been received in addition to assurance that the payment is posted quickly to prevent the shutoff. Utilities should establish bill payment services in locations that enhance convenience, such as supermarkets, drug stores, convenience stores, other retail outlets, community groups, and banks or other financial service providers that do not lend money at exorbitant rates. A new development being used in some places features utility bill payment “kiosks” that have user-friendly functionality similar to automated teller machines (ATMs) and are sponsored as a shared project of water, electric, gas, telephone, and other utilities. These are reported to be very popular and very inexpensive.

An exception to the above emphasis on facilitating cash payment has been noted by some utilities after the introduction of credit card payment via telephone or Internet. Although these payment methods are surely not available to the majority of low-income customers, they can be accessed by some customers through a friend or relative that does have such access. The speed at which payment can be registered by these means can make the difference in staving off disconnection.

CHAPTER 13

SHRINK THE OVERDUE CASELOAD AND ARREARAGES: CRISIS ASSISTANCE PROGRAMS

Strategy 2

Shrink the Overdue Caseload and Arrearages

- ✓ Prevention Before-the-Fact
- ✓ Intervention After-the-Fact
- ✓ Crisis Assistance Programs
- ✓ Deferred Payment Plans
- ✓ Programs to Minimize Recurrences

The operation of a crisis intervention fund is often used as a mechanism through which to deliver assistance to customers beset with temporary financial crises stemming from illness, job loss, or family distress. Crisis intervention funds are commonly utilized by regulated gas and electric distribution companies. A crisis intervention fund can deliver real benefits not only to payment-troubled water customers, but also the utilities that serve those customers.

FUNDRAISING FOR CRISIS ASSISTANCE

The fundamental fundraising decision for a crisis intervention fund involves the degree of discretion to be given to customers over whether they contribute to such a fund. A continuum of choices exists, as illustrated in [Figure 13.1](#). At one end of the continuum lies a mandatory system benefits charge (SBC). The mandatory nature of this type of charge is based on the observation that addressing the nonpayment issues

of payment-troubled customers is a system-wide problem, the resolution of which generates system-wide benefits. When the payment troubles of chronically delinquent customers are reduced or resolved, the utility reduces a wide range of costs, ranging from the working capital associated with carrying arrears, to the bad debt associated with ultimate nonpayment, to the staff and transportation expenses associated with the credit and collection cycle. To the extent that payments into the crisis fund are not mandatory, the utility runs the risk of free-ridership, with some customers benefiting from the reduced costs but refusing to support the fund that generates those cost reductions.

A second level of discretion lies in using an opt-out mechanism for generating participation in the crisis intervention fund. An opt-out mechanism provides that a consumer will be charged a monthly fee to support the crisis intervention unless the consumer specifically indicates that he or she does not wish to do so. Placing the impetus on the customer to take action to opt-out is justified by the observation that the customer has been compensated for the limits on his or her discretion through the receipt of the reduced expenses that are allocated to all consumers through rates.

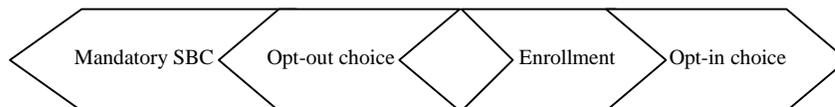


Figure 13.1 Continuum of customer discretion in crisis fund payments

At the opposite end of the continuum from a mandatory fee is the completely voluntary opt-in charge to support a crisis intervention fund. Unlike the mandatory or opt-out charge, the opt-in fee has the look and feel of a charitable contribution. Rather than being viewed as a charge to help the water company address the business problems of nonpayment, the opt-in mechanism is styled as a “contribution” to the “needy.” Since such payments are considered contributions, there is no expectation that the payment will be matched. Accordingly, no need exists to identify and isolate the cost savings generated to the utility through the distribution of the crisis funds so that those savings could be passed through to the customers financially supporting the effort that help generate the savings in the first instance.

A middle ground is increasingly being used to support crisis intervention that walks the line between the opt-in and the opt-out approaches. Pioneered by State telephone assistance programs in Illinois and Pennsylvania, these crisis intervention funds “enroll” customers in a contribution program. Once enrolled, however, the customer thereafter is affirmatively billed for the support payment unless and until the customer asks to be removed from the program. Under this “enrollment” process, the payment in support of the crisis intervention fund becomes a part of the underlying bill until the customer subsequently opts-out of paying it. The program enrollment funding mechanism provides the customer discretion of the opt-in mechanism while also providing the funding stability of the opt-out mechanism.

CUSTOMER CONTRIBUTION OPTIONS

A utility seeking to collect funds for a crisis intervention program has multiple ways through which the customer might select how much to pay. Common mechanisms that are used include:

- **A round-up program.** Through a round-up program, the customer agrees to allow the company to round up a bill for current service to some designated level. Rounding up a bill to the next whole dollar is perhaps the most common approach, while allowing the option of rounding up to the next \$5 or \$10 level might also be used. Under a round-up program, the utility would need to take the initiative to track the payments that are received and to transfer those payments to the crisis intervention fund on a monthly basis.
- **An add-a-dollar fund.** An add-a-dollar program allows the utility’s customer to make a selected payment each month to the company’s crisis intervention fund. While solicitations for payments of \$1 to \$5 are common, research shows that customers, if given an open-ended selection choice, choose to increase their contribution frequently enough to make it worthwhile to provide the open-ended selection.
- **Periodic solicitations.** A final way to generate funds for crisis intervention is through periodic solicitations. Done through bill inserts or “articles” in periodic utility newsletters to their customers, these solicitations frequently do not use the utility bill itself as a mechanism through which to collect the funds. Those solicitations not using the bill as the payment collection device generally include a return-envelope—either to the utility or to a designated local nonprofit—which a customer must return with their donation. Periodic solicitations that are placed right on the bill, with the customer making a choice of whether or not to contribute at the time they make the bill payment, have been found to be much more effective in generating funds than those mechanisms which use a separate return envelope.

While the round-up approach can be implemented through the opt-in, opt-out, or enrollment process, the add-a-dollar approach is limited to the opt-in and enrollment process.

FUND DISTRIBUTION OPTIONS

Two choices present themselves to the water utility that seeks to address the payment troubles of some customers through a crisis intervention fund. The first choice involves whether to operate the crisis intervention fund as an in-house program or through an independent third-party. The second choice involves defining the circumstances that merit the grant of crisis intervention support.

THE ADMINISTERING BODY

While some utilities decide to administer their crisis intervention funds internally, the more common approach is to use an independent community-based organization (CBO) as the benefit provider. Keeping the fund distribution in-house allows the utility to maintain the closest control over the grant of benefits. In addition, keeping the fund distribution in-house ensures that the water utility “gets credit” for operating the crisis intervention initiative, rather than simply being one more contributor to a broader community-based effort.

As a general rule, however, these considerations do not tip the scale in favor of in-house distribution. Most utilities decide that their in-house staff have neither the training nor the expertise to perform the intake and income verification needed to operate the crisis intervention fund. In addition, association with a broader community-based “brand name” service provider is generally believed to facilitate rather than to impede contributions. Fundraising efforts directed toward an in-house crisis intervention fund are often viewed as self-serving to the utility rather than as a community service supported by the utility. Moreover, customers who are in debt to the utility, and who face a substantial inability to pay, are more likely to approach a CBO for assistance than to approach the creditor-utility.

Even if distributed through an independent CBO, however, a water utility passing through customer payments in support of crisis intervention has the right to insist that those payments only be used as benefits paid to address the payment troubles of the utility’s customers. (This observation does not hold true if payments are provided by contributors directly to the independent third party as described above.)

The Benefit Payment Trigger

A final decision for the utility involves delineation of circumstances that qualify a customer for a crisis intervention payment. On the one hand, the very nature of a “crisis” intervention fund would seem to indicate that the fund should be used primarily to prevent the disconnection of service due to nonpayment. The use of a crisis intervention fund for this purpose would short-circuit the social problem of a customer losing access to basic water service, while at the same time helping the utility avoid incurring the expense of the disconnect (and reconnect) process.

On the other hand, some crisis intervention funds have reasonably decided that predicating the receipt of financial benefits on the existence of a pending disconnection for nonpayment *encourages* a customer to push the utility collection process to the point of

disconnection rather than resolving his or her arrears at an earlier (and perhaps more manageable) stage. While crisis intervention funds are certainly available to stop a pending disconnection of service, in these circumstances, they are not limited to the disconnection situation. These funds distribute crisis intervention grants based upon a combination of factors including income, the level of arrears, and the ability of the fund to resolve those arrears. Whether or not tied to a pending disconnection of service, crisis intervention funds are not intended to be a broad-based rate affordability program. They are, indeed, tied to a resolution of payment difficulties; however, the utility may choose to define those difficulties.

Under either approach above (use of the crisis intervention fund as a shutoff prevention device or use of the fund as an arrears resolution device), the utility may or may not wish to condition its distribution of benefits based on low-income status. While many crisis funds are directed exclusively to “low-income” customers, others may focus outreach on low-income customers, but reserve the authority to distribute funds to any customers when a review of income and expenses reveals an inability to pay the water bill without outside assistance.

CHAPTER 14

SHRINK THE OVERDUE CASELOAD AND ARREARAGES: DEFERRED PAYMENT PLANS



The offer of deferred payment plans through which to retire arrears is an essential tool for a water utility to use in delivering rate assistance to payment-troubled customers. Through a deferred payment plan, a customer in arrears should make a reasonable down payment toward the arrears and agree to retire the remaining arrears over a reasonable period of time. As can be seen, the two primary elements of a deferred payment plan include:

- The amount of the initial down payment
- The amount which the customer in arrears will pay each month toward the pre-existing arrears

The primary design principle involved with the offer of a deferred payment plan is the determination of “reasonableness” as to these two factors.

Standard State utility commission regulations provide that the reasonableness of a payment plan is to be determined based upon a consideration of a range of factors, such as the amount of the unpaid bill, the time the bill has been outstanding, the reason(s) the bill has been outstanding, and the ability of the customer to pay.

Even though these factors may not lead to an arithmetic determination of a “reasonable” payment, what they do lead to is the conclusion that a water utility should exercise a case-by-case discretion in deciding upon a payment plan, with the reasonableness of the payment plan supportable by fact-specific considerations of the stated factors. When required to consider specific factual circumstances involving the customer and his or her debt, a water utility would be hard-pressed to impose uniform payment plan terms or terms that are dictated “by policy.” Instead, the water utility should be able to justify the payment plan terms it seeks to impose (e.g., down payment amount, monthly payment amounts) by reference to fact-specific determinations relevant to the specific circumstances of the affected customer.

DOWN PAYMENT DECISIONS

Two fundamental approaches exist to assessing the reasonableness of a down payment required prior to the offer of a deferred payment plan. On the one hand, a water utility may ask for a percentage of the bill as a down payment. Down payments based on this approach frequently require the customer to make a payment ranging from 10% up to 50% of the outstanding balance. Precisely where a customer falls within that continuum depends upon the specific factual circumstances of the customer. It may be that a lower-income customer would be required to make a smaller down payment. A customer who has made no payments toward his or her bill for multiple billing periods may be required to make a larger down payment. A customer

who agrees to enter into an agreement involving an automatic withdrawal from his or her checking account may merit a smaller down payment.

Down payments based on a percentage of income tend to range between 5% and 15% of *monthly* income. A customer with a monthly income of \$700, in other words, might be required to make a down payment of \$70 should the utility find that a 10% of income down payment is appropriate. Under this approach, customers with lower incomes are generally entitled to lower percentage of income down payment amounts.

In fact, some utilities combine the two approaches, requiring a down payment of *either* a percentage of the bill (e.g., 25%) or a percentage of income (e.g., 10%), whichever is less.

Some utilities get into trouble when payment plan negotiations fail because the utility's customer service representative (CSR) did not offer the customer the minimum terms available. It is not unusual for a utility to ask its CSRs to obtain the largest down payment possible toward a pre-existing arrears as part of the negotiation of a deferred payment plan. However, if by regulation, a customer is entitled to a down payment of no more than 20% of the outstanding bill, the CSR engages in an unfair and deceptive act if he or she informs the customer that anything less than 50% is unacceptable. Indeed, for municipally owned water utilities, providing notice of the full range of payment plan terms options that are available to the customer may be an action that has a constitutional basis.

Under most utility commission regulations, it is the obligation of a utility to “offer” a reasonable payment plan. Under such a regulation, the obligation on the utility is proactive. The utility does not act as a passive spectator in accepting a payment plan proposed by the customer. A customer may not be called upon to reject an unreasonable payment plan prior to the utility's offer of a reasonable plan.

MONTHLY PAYMENT DECISIONS

Many—perhaps most—utilities offering deferred payment plans base decisions upon an examination of the length of the payment plan (in months), with the monthly payment amount being a result of the plan term as set forth below. Under this approach, the amount of the monthly payment toward the pre-existing arrears is a result of the number of months over which the customer is allowed to spread payments for the arrears.

$\text{Monthly payment} = \text{Pre-existing arrears} / \text{Term in months}$ $\$300 \text{ pre-existing arrears} / 6\text{-month payment plan} = \$50 \text{ payment toward arrears}$

The better approach is to flip that consideration. Under this alternative approach, the term in months is a result of the affordable payment offered to the customer.

$\text{Pre-existing arrears} / \text{Affordable monthly payment} = \text{Term in months}$ $\$300 \text{ pre-existing arrears} / \$30 \text{ per month} = 10\text{-month payment plan}$
--

One municipal water utility, for example, offers two types of extended payment plans for customers that document an inability to pay but that do not income-qualify for the utility's “low-income” program. On the one hand, the utility offers its 10/5 program, through which the utility offers a payment plan consisting of a down payment of 10% of the outstanding arrears plus 5% of the arrears per month. If even that plan is unaffordable, the utility offers its D/I (“disposable

income”) plan, where the utility works with the customer to document the customer’s D/I and offers a payment plan of up to 60 months.

Other utilities, both water and energy, work with their customers to offer extended payment plan terms when appropriate. These utilities recognize that imposing a deferred payment plan with unaffordable terms not only impedes the ability of the customer to successfully complete the payment plan, but also threatens the ability of the customer to pay the current bill when it comes due. A utility that experiences high default rates on its deferred payment plans should carefully examine the decision-making which underlies the payment plan terms that it offers.

THE MULTIPLE ASPECTS OF ABILITY TO PAY

One basic tenet of negotiating a deferred payment plan is that the phrase “ability to pay” is not synonymous with the word “income.” The level of a household’s income is but one aspect of a household’s ability-to-pay. Consider that ability-to-pay is also a function of:

- The household’s D/I. A low-income household with school-age children, for example, will have lower D/I during the summer months when the household does not have access to the free and reduced school lunch/school breakfast program and possibly increased costs for child day care.
- The household’s fragility of income. Particularly with working poor households, income may widely vary from month to month. Working poor households tend to work lower-quality jobs, with frequent exposure to involuntary part-time employment, as well as to lost wages attributable to the lack of paid family or medical leave or flexible work hours.

Deferred payment plans offered by water utilities generally involve immediately beginning the repayment process, though nothing exists in the law requiring that agreements be approached in this manner. Indeed, particularly when a regulatory framework requires the water utility to take into consideration the customer’s “ability-to-pay,” more innovative payment plan structures are merited.

One common approach to delinquent payments in the home mortgage industry, for example, involves offering a period of reprieve during a time in which the customer is experiencing hardship. Such a period of reprieve recognizes that frequently the nonpayment of current bills results from a temporary economic hardship—this hardship might be based on unexpected expenses or a temporary loss of income—that impedes the customer’s ability-to-pay. Rather than imposing immediate additional payment responsibilities on customers during such a difficult time, a period of reprieve might involve, for example, offering the customer a prescribed period of time (perhaps one or two months) during which to put his or her affairs in order so that regular payments may begin anew. This approach does not excuse the customer from paying a current bill during the period of reprieve, but merely postpones the start of any repayment obligation for a limited period of time. A water utility operating under a regulatory requirement to take into account the reason that bills have remained unpaid might even face an argument that such a period of reprieve is needed to respond to the cause of the previous nonpayment.

Similarly, deferred payment plans offered by water utilities generally involve the offer of equal monthly payment plans, though nothing exists in the law requiring that agreements be approached in this manner. Consistent with the period of reprieve, for example, a water utility

might require minimum payments toward pre-existing arrears for the first month or two while the customer repairs the financial circumstances leading to the nonpayment, with higher payments becoming due in later months. Consistent with the requirement that payment plans take into account ability-to-pay, payment amounts might vary by season to respond to seasonal variations in gross or disposable household income.

SECOND PAYMENT PLANS

Whether to offer a second payment plan to a customer that has defaulted on his or her first plan presents a water utility with the need to honestly assess the objectives and functions of the payment plan process. On the one hand, some utilities insist that if an initial payment plan has been breached by the customer, the utility is under no obligation to offer that customer a second opportunity to retire his or her arrears. Other utilities recognize the fragility of the income available to a low-income household. Not only might the income, itself, sharply vary month-by-month, but the ability of the household to cover its complete expenses may vary by month, depending upon whether the children need medical care, the parents need additional child care, the automobile or home needs repairs, or a host of other factors.

One nearly universal attribute of a low-income household, whether it be a working poor household, a fixed-income elderly household, or a disabled household on public assistance, is the lack of financial assets such as a savings or checking account that provides a cushion against reasonably expected financial exigencies. To refuse to exercise any flexibility under such circumstances is a failure to take into account all aspects of a household's ability-to-pay.

There are three ways in which a deferred payment plan agreement might be modified:

- Offering a “second payment plan” after a customer has breached or broken his or her “first” agreement allows the customer to spread the remaining unpaid balance from the initial plan, plus any subsequent unpaid bills, over a new amortization period.
- Allowing a “renegotiation” of the first payment plan applies only to the initial arrears subject to agreement. A renegotiation generally occurs when the customer has experienced a change of circumstances sufficient to make the terms of the first payment plan unreasonable. Frequently, some utilities require a customer to request a renegotiated payment plan prior to receiving a shutoff notice, while others require a request to occur before an actual disconnection of service.
- Allowing the “reinstatement” of a payment plan maintains the terms of the original payment plan. To the extent that a customer can make-up any missed payments toward the original agreement, the customer is allowed to continue as though each payment were made in a timely fashion with which to begin.

The approach of one Midwestern regulatory commission reflects perhaps the best balancing of a utility's right to insist on customers maintaining their payment plans while at the same time providing flexibility for a customer to seek a new plan after defaulting on an initial plan. Under regulations promulgated by the Iowa Utilities Board, a utility is required to offer a second payment plan so long as the customer has made a good faith effort to make payments on the previous plan. A “good faith effort” is defined as a customer making at least two consecutive payments on the prior plan.

Pennsylvania requires different payment plan terms to be offered depending on the income of the customer in order to facilitate customer payments. Wisconsin and Pennsylvania require that customers be allowed to renegotiate payment plans when there was a significant change in household circumstances. Most states allow, but do not require, utilities to permit customers to “cure” missed payment plan payments, although Oregon and Nevada both require cures so long as the customer has not yet had his or her service disconnected for nonpayment, while Vermont bans the disconnection of service so long as there has been “substantial compliance” with a deferred payment agreement.

The offer of payment plans, the design of their terms, and the proffer of cure provisions, are all important components to payment options.

INCENTIVES AND PENALTIES WITH PAYMENT PLANS

While the most effective mechanism to use in supporting the successful completion of a deferred payment plan is ensuring that the payment plan is affordable, water utilities can encourage and reward their customers’ entry into, and maintenance of, deferred payment plans through a variety of proactive mechanisms as well.

The primary incentive for a customer to enter into payment plans involves waiving late payment charges for arrears that are subject to payment plans on which customers are current. Many utilities agree that, so long as the customer maintains his or her current payment toward a payment agreement, the pre-existing arrears will not be subject to a late payment charge. However, if the customer fails to maintain payments on the underlying agreement, the late charge may apply not simply to the missed payments, but to the entire underlying arrears.

In addition to encouraging customers to successfully maintain their payment plans once entered, the task of convincing customers to contact the water utility to negotiate a deferred payment agreement with which to begin is even more daunting. One successful “reward” for entering into a deferred payment plan involves the relaxation of internal policies prohibiting customers from using levelized billing plans so long as the account has an unpaid balance. Despite such a policy, some utilities provide that the policy will be waived for customers entering into a deferred payment agreement for their arrears. While many water bills do not exhibit the same level of seasonality that home energy bills do, the option of having regular, equal bills assists the household budgeting process for customers in arrears.

Not all incentive programs involve the mere act of entering into a deferred payment arrangement. One common practice involves utilities agreeing to postpone further collection processes for some period of time (e.g., 30-days, 60-days) so long as the customer receives a commitment from a public or private crisis funding source to pay the down payment on a deferred payment agreement. One water utility suspends collection processes toward all arrears for income-eligible customers so long as the customer enters its low-income program, receives a benefit payment, and makes current bill payments. The arrears is not “forgiven;” indeed, the utility maintains a lien on the customer’s property so that the utility will be paid from the sale proceeds in the event of a property transfer. The customer, however, is not burdened with the obligation to retire the pre-existing arrears in addition to staying current on bills as they come due.

ARREARAGE FORGIVENESS

A growing realization exists in the utility industry that circumstances exist under which the best treatment of an arrearage is to write them off and give the customer an opportunity to become a good paying account on a going forward basis. Viewing the arrears in this manner allows the utility to convert what appears to be a liability into an asset that can be used for the benefit of the customer and the utility. The write-off is seen as an opportunity to use a series of credits applied against the pre-existing arrears as an incentive for customers to learn new payment habits under which they make full and complete payment.

The programs are known by a variety of names: arrearage forgiveness, arrearage management, arrears retirement, and arrearage credits. Whatever the name, however, the fundamental predicate of such a program involves an exchange with the customer. The utility will, in exchange for complete payment toward future bills for current usage, offer a series of credits which, over a specified period of time, result in a complete retirement of the pre-existing arrears.

The Prerequisite to Earning Credits

The most significant design decision to make in implementing an arrearage forgiveness program involves the payment behavior the customer must make in order to earn the arrearage credit. While that decision may, at first blush, appear to be easy—the payment behavior desired is full and timely payment each month—the actual operation of programs has made clear that there are nuances that must be taken into account.

The most common approach to providing arrearage forgiveness is to apply a credit against the participant's bill each time that customer makes a full payment toward his or her arrears. The “full payment” requirement has been implemented in three different ways.

- By far the most prevalent is for the utility to grant an arrearage credit upon receipt of a full payment whenever that full payment is made. This approach, in other words, offers liberal “cure” provisions to the customer. If the customer misses a payment in Month 1, he or she will still receive arrearage forgiveness for that month if the Month 1 payment is made in Month 3. The trigger for the grant of the credit, in other words, is receipt of the payment, not the timing of that receipt.
- A second approach is for the customer to lose the right to earn an arrearage credit for any month in which a payment is not made in a full and timely fashion, with the credit that would have been available in that month being moved to the end of the forgiveness period. Assume, for example, that a utility offers arrearage forgiveness over a 24-month period. For each full and timely payment, the utility provides a credit equal to 1/24th of the customer's pre-existing arrears. If the customer misses his or her payment in Month 7, the right to earn an arrearage credit is lost for that month, but that right is moved to Month 25. Each month of missed payment, in other words, extends the arrearage forgiveness period for an additional month.
- Finally, a distinctly minority approach is for a utility to offer arrearage forgiveness over a specified period of time predicated on full and complete payment each month. For each month in which a full and complete payment is not received, the program participant permanently loses the right to receive that portion of the potential arrearage forgiveness.

Assume, for example, that a utility offers arrearage forgiveness over a 24-month period. For each full and timely payment, the utility provides a credit equal to 1/24th of the customer's pre-existing arrears. If the customer misses his or her payment in Month 13, the customer loses the right to earn the forgiveness of that portion of his or her pre-existing arrears. In Month 25, the amount of the pre-existing arrears that was not forgiven is placed back on the customer's bill and the customer returns to the collection cycle.

Providing reasonable cure provisions is an important aspect of arrearage forgiveness. The customers for whom arrearage forgiveness is necessary represent customers with a history of nonpayment. These customers need to "learn" good payment practices; such learning does not occur instantaneously. Moreover, evaluations of rate affordability programs operated for regulated natural gas and electric utilities in a variety of states have found that while such programs result in improvements in payment performance, performance cannot be expected to be "perfect." It is reasonable to see fits and starts in current bill payment as customers enter a forgiveness program, with payment performance improving over time.

Customer Copayments

When a utility decides to offer an arrearage forgiveness program, one fundamental decision is whether to require the customer to pay some portion of the arrears as a condition to receiving the arrearage credits. While it philosophically might seem appropriate for a customer to take some responsibility for their pre-existing arrears, most utilities offering arrearage forgiveness programs decide that the cost of implementing systems to track customer copayments, and to credit accounts with an appropriate arrearage forgiveness after subtracting the customer copayment, exceeds any financial benefit obtained from the customer copayment in the first instance. Those utilities that require customer copayments tend to require arrearage payments in the range of \$3 to \$5 per month for the life of the arrearage forgiveness. A customer making a \$5 copayment in a 24-month arrearage forgiveness program, for example, would pay \$120 toward his or her pre-existing arrears.

An easier way to implement a copayment requirement is simply to restrict arrearage forgiveness to customers meeting minimum levels of pre-existing arrears. The New Jersey Universal Service Fund (USF) program, for example, restricts its arrearage forgiveness program (called the Fresh Start program) to customers with arrears greater than \$60 (effectively, a \$5 copayment over 12 months). The Maryland Electric Universal Service Program restricts its program to customers with arrears exceeding \$300. While limiting an arrearage forgiveness program to a level of arrears that exceeds a certain level does not serve the philosophic "personal responsibility" function of imposing on customers a sharing of responsibility for their pre-existing arrears—all customers with arrears above the prescribed level have their entire arrears forgiven—it does help to serve the financial function of limiting the cost consequences of an arrearage forgiveness program.

The Forgiveness Period

Significant variation occurs in the period over which a utility will grant forgiveness of a pre-existing arrears as part of an arrearage forgiveness program. On one end of the continuum are those programs that provide a customer a clean slate at the very beginning of the program.

This clean slate is not only easier administratively—there is no need to track customer payments during the program; no need to implement a billing system capable of posting credits against preprogram arrears—but it also makes ongoing billing and payment tracking administratively simpler as well. If all pre-existing arrears are forgiven at the time of entering a program, there is no need to distinguish between arrears existing at the time the customer entered the program and arrears incurred subsequent to program entry. Any arrears appearing on a bill subsequent to the date of program entry must, by definition, be arrears incurred during program participation (and thus not subject to forgiveness).

The majority of programs involve a forgiveness of pre-existing arrears over a two- to three-year time period. This time period is reasonable, in that it allows a customer to see a steady decrease in the arrears owed to the utility, while at the same time spreading the costs of the forgiveness over a longer period of time, thus making the annual arrearage forgiveness costs lower. In contrast, fewer utilities forgive arrears over a one-year period. The New Jersey USF provides for forgiveness over 12 months, but provides a three-month grace period for participants to bring their bill current (and thus gain forgiveness) if they have current arrears at the end of the 12-month period. One Pennsylvania utility offers forgiveness on a six-month rolling basis. At the end of six months, the utility begins a monthly inquiry of the account. After Month 6, in any month in which the balance is current, the utility provides complete forgiveness of pre-program arrears.

Two different utilities offer a forgiveness period that differs based upon the amount of arrears a customer brings into their respective programs. One natural gas utility, rather than providing a pro rata forgiveness each month (e.g., 1/24th a month over 24 months), provides a matching credit. Under this program, a customer is charged \$5 toward his or her pre-existing arrears, with the utility providing a \$3-for-\$1 matching grant for each \$5 payment made. (The \$5 payment toward arrears represents the first dollars taken out of a customer payment in any given month, so the arrears payment is made and the matching credits provided, before any payment toward the current monthly bill is posted to the customer's account.) Given the total \$20 monthly drawdown against the pre-existing arrears each month, the utility estimates that, on average, customers take four years to retire their arrears. Customers with smaller arrears, however, obviously clear their accounts sooner, while customers with larger arrears take longer.

In contrast, one electric utility directly ties the forgiveness period to the level of arrears that a customer brings into the utility's program. Customers with pre-existing arrears of \$1,000 or less are allowed to retire arrears over a 12-month period. Customers with arrears between \$1,000 and \$2,000 retire their arrears over 18 months, while customers with \$2,000 to \$3,000 in pre-existing arrears retire their arrears over 24 months. Customers with more than \$3,000 in arrears retire their arrears over a 36-month period.

Finally, one Colorado natural gas utility ties the customer copayment toward pre-existing arrears to a percentage of income which, in turn, is tied to the level of arrears brought into the program. Customers are required to pay 1.0% (one percent) of income toward their arrears each month as part of a PIPP (the affordable payment for the overall bill for current usage is set at 5% of income).

DEPOSITS AS AN ASSET RATHER THAN AN OBLIGATION

The function of cash deposits required of utility customers is generally defined within the context of bad debt. That context, however, needs some detailed exploration. Bad debt is an

expense to the utility just like any other expense. As such, it is an expense that a utility can and should seek to reduce where possible. The reduction of bad debt, however, is not an end unto itself. Also like any other expense, a utility is not justified in spending more on the means to reduce bad debt expense than the savings that are generated through such an effort. The goal of a water utility, in other words, is to minimize total expenses to the ratepayers, not simply to minimize bad debt expenses.

Aside from basic fairness, for deposits to be cost-effective from a utility's business perspective, they must result in a reduction in uncollectibles at least equal to the cost of obtaining and servicing the deposits. In order for this reduction to occur, the customers from whom deposits are demanded must represent a risk of loss to the utility. If, in other words, the customer does not represent a potential situation where the utility will experience a permanent loss of arrears, i.e., any deposit collected from that customer—whatever the size—has no relation to the risk of loss due to uncollectibles. In that instance, to collect a deposit will impose only costs on the system and result in no benefits to offset those costs.

Avoiding the Unjustified Deposit

Two situations exist in which utilities often collect unjustified deposits. First, the automatic imposition of a deposit after a disconnection for nonpayment is not necessarily justifiable. Second, the imposition of a deposit based on a bad credit history reported for nonutility transactions should be avoided.

The first way in which utilities over-secure themselves is to automatically seek deposits after a disconnection for nonpayment. To automatically seek deposits in such circumstances may appear to be attractive at some cursory level of analysis. To demand deposits in such instances, however, in fact, does not necessarily represent a rational means of protecting against the risk of bad debt. The underlying question is whether and to what extent the disconnection of service is an indicator of the risk of loss due to bad debt in the future.

A disconnection of service, standing alone, provides no information as to the risk of revenue loss to the utility. Indeed, most data support the opposite conclusion: that the disconnection of service tends to successfully coerce payment from households in arrears, thus minimizing the risk of future loss due to bad debt from those households. Most households, for example, are reconnected to the system. Moreover, most households pay some substantial part (though not all) of their arrears before being reconnected to the system. For those households, while the arrears may not be entirely paid prior to reconnection, the utility enters into deferred payment agreements whereby the arrears underlying the disconnection are retired over time. As can be seen, therefore, the mere disconnection of service, standing alone, does not represent a risk of loss due to bad debt.

In deciding upon whether a deposit is justified, the risk of late payment should be distinguished from the risk of permanent loss. The costs associated with late payment cannot be addressed through a deposit. A deposit is to protect against loss due to bad debt. The disconnection of service, standing alone, is no indication of the risk of permanent loss to the utility through bad debt.

The risk of permanent loss is from households who permanently leave the system after a disconnection of service. It is the arrears of those households which end up in bad debt, not the arrears of households who a utility successfully places on a deferred payment plan. Before a utility can conclude that the disconnection of service ipso facto is an indicator of the risk of loss

to the utility from bad debt, the utility should be able to show that households which are disconnected remain disconnected and do not pay the arrears underlying the disconnection.

A second failing in the determination of whether deposits should be sought is the use of third-party, nonutility, credit information. Utilities who use third-party supplied information as a basis for deposit demands may face particular problems with justifying their deposits on cost-effectiveness grounds. Third-party information is used by some utilities to determine whether new applicants for service are “creditworthy.” Rather than directly denying service, a utility simply requires a household deemed to be noncredit worthy to post a cash deposit.

The use of third-party supplied credit information as a basis for making utility deposit decisions constitutes a problem when the third-party information is not itself comprised of utility payment histories. Several reasons support this conclusion. First, substantial research has found that consumers tend to pay their utility bills before paying nearly any other outstanding credit (other than rent or mortgage obligations). Second, it has been found that low-income consumers frequently acquire poor credit ratings by refusing to complete payments on installment purchases of defective or shoddy merchandise. Finally, a person who has never borrowed from a reputable institutional lender, or maintained a charge account at a large store, may have difficulty establishing that his or her credit is “good.” As a result, information from a credit reporting agency that indicates a lack of creditworthiness based on nonutility transactions does not provide useful information as to a customer’s likelihood of paying a home utility bill. As a result, information from a credit reporting agency that indicates a lack of creditworthiness based on nonutility transactions does not provide useful information as to a customer’s likelihood of paying a home utility bill.

Avoiding the Excessive Deposit

One means by which utilities over-secure themselves against the risk of loss by collecting an excessively large deposit is to impose maximum permissible deposits automatically. Some PUCs, for example, permit a utility to collect a deposit equal to no more than twice the average monthly bill for a customer. Despite the authorizing nature of the deposit language, many utilities automatically set deposits at twice the average bill. To automatically set the deposit amount at the allowed maximum is most likely to over-secure against losses since it is probable that households do not frequently represent the maximum risk.

A second means by which a utility tends to over-secure itself is by basing its deposit demand on the largest monthly bill (or some multiplier thereof). This policy assumes that out of 12 monthly bills, the bill most likely to remain permanently unpaid is the largest. No empirical basis has been found to support this assumption.

The policy of collecting based on the largest bill appears to be based on the notion that the greater the security the better. Collecting greater security creates no benefits, however, and instead creates only uncompensated costs, when the increase is not matched to an increased risk due to bad debt. For a deposit to be cost-effective, it must reduce bad debt expense by an amount at least equal to the costs of obtaining and maintaining the deposit. If the risk of loss is not the highest monthly bill, then such a match does not occur.

In sum, many utilities use cash security deposits to secure bill payment. However, there are numerous options that a utility can adopt to protect itself while at the same time giving the customer options to help facilitate payment, such as the following:

- Exempting low-income customers from the payment of cash security deposits helps to provide an option to customers that may not be able to afford to pay such deposits in addition to their current bill (and/or arrears). The State regulatory commissions of Minnesota and New Hampshire, for example, both exempt low-income customers from the payment of cash deposits.
- Accepting guarantees (or sureties) in lieu of posting a cash security deposit is one tool to secure payment without exhausting a customer's cash that might be devoted to payment of current bills (and/or arrears). Some utilities impose strict limits on who might be a guarantor. New Jersey utilities, however, allow for a broad range of guarantors, so long as the guarantor is acceptable to the utility. No artificial restrictions (e.g., only a utility customer, only a residential customer) are imposed.
- Encouraging the provision of a guarantee in lieu of a cash deposit by a social service agency that would otherwise provide cash to help pay a deposit is practiced in several states. New Jersey, Minnesota, New Hampshire, Mississippi, and Oklahoma all allow community-based organizations to leverage limited financial resources by allowing such agencies to provide guarantees rather than cash security deposits. In North Carolina, utilities accept a commitment from agencies to make a designated bill payment amount in lieu of a cash security deposit.
- Accepting less than the maximum cash security deposit allows customers to secure their bill payment while not necessarily exhausting their ability to pay current bills (and/or arrears).

CHAPTER 15

SHRINK THE OVERDUE CASELOAD AND ARREARAGES: PROGRAMS TO MINIMIZE RECURRENCES



The issues that cause low-income households to experience difficulties in paying utility bills are not typically resolved when the bill is finally paid and the case is closed in the customer service department. It is well established that low-income customers are prone to repeated incidences of nonpayment due to the tenuous nature of their income and the variability of household expenses. In such circumstances, utilities may incur the administrative costs of collections, bad debt, and disconnections and reconnections over and over again in a perpetual cycle. After the first time, however, a utility's customer service department is conceivably in possession of information regarding the account that can be used to direct additional forms of utility assistance programs (e.g., conservation) and other outside social services to the household. Utilities should not miss this opportunity to intervene in a targeted fashion and perhaps help to break the cycle of payment problems.

While provision of social services clearly lies outside the core function of a utility, it is nonetheless a best practice for customer service representatives (CSRs) dealing with nonpayment issues to be very knowledgeable of services available from local private sources as well as from Federal, State, and local government programs. There are many ways that a utility can leverage these sources to help prevent recurrences of nonpayment:

- Utilities can require a subsidized in-home conservation audit and retrofit as part of the requirement for a deferred payment plan, helping to reduce bills in the future.
- Utilities can maintain data on the account history in their customer information system that will enable CSRs to react swiftly at the first sign of trouble in the future, before large arrearages develop.
- Utility CSRs can meet and become acquainted with people at the appropriate social service organizations to understand these programs on a first-hand basis. This can be arranged through training seminars, etc.
- CSRs can promote specific social assistance programs person-to-person while talking to customers in the course of resolving current nonpayment incidents.
- Targeted mailing packages can be devised for different types of nonpaying households by providing literature obtained from other organizations to make customers aware of social assistance programs and providing contact information.
- Integration of utility customer data systems with the client data systems of social service agencies will permit utilities to alert social service agencies of specific households experiencing payment troubles, enabling targeted outreach by social service providers.

Given the recurring nature of nonpayment problems and the inherent relevance of social assistance programs, best practice utilities will clearly seek to maximize the extent to which after-care strategies such as these can be applied to minimize the likelihood of recurrence.

CHAPTER 16

SHRINK THE COST OF COLLECTIONS



An over-arching business objective is the goal of improving the total “net revenue” obtained by a collections program (Colton 1991). By continually investigating the attributes of payment problems in the community, segmenting the customer base into appropriate subgroups, and devising and testing targeted strategies to address the issues unique to each subgroup, less effective “treatments” can be systematically replaced with more effective treatments.

The desired end result is to enhance the total level of revenue recovered for the effort expended in each subgroup and thereby across the entire customer base. The conventional one-size-fits-all approach to collections applies identical collection treatments to all nonpaying accounts and is bound to fail in a large number of instances. As a result, much of the cost incurred in collections for these accounts is wasted and the revenue is never recovered. In contrast, the targeted approach of a customer assistance program applies treatments to each subgroup that are more likely to recover some or all of the

outstanding revenue to offset the collections cost incurred, producing higher “net revenue.” This fundamental net revenue reality of the situation is a central argument that is relied upon to support programs assisting payment-troubled customers in response to criticisms that such targeted or special treatment for certain accounts violates long-standing principles of utility service involving equal treatment of rate payers and avoidance of cross-subsidization between rate payers. The reality is that there is a strong business case for taking a smarter approach to collections.

Optimizing the cost of collections involves more than just identifying tailored strategies in terms of effectiveness for individual subgroups of nonpaying customers. It also involves identifying the type of nonpayment relative to the result to be produced in light of the business outcomes that the utility wishes to control. A utility will want to try to identify those combinations of nonpayment issues and causes of nonpayment that are most prevalent in their data in order to prioritize the tailoring of specific treatments for the most important segments. Beyond considering the most economic program strategies and practices for improving net revenue outcomes for individual segments, an additional overlay that should be applied involves consideration of the financial objectives of the utility as an additional criteria for assessing priorities for implementation. For example:

- If the utility is concerned about working capital, it will want to accelerate late payments. Accelerating payments toward many small account balances with 60-day arrears to 30-day arrears may offer greater opportunity for controlling carrying costs than would addressing a few accounts with very large, or very old, arrears.
- If the utility is concerned about bad debt, it will want to expand payments on accounts with very old, or very large, arrears. Even if such payments do not completely retire those

arrears, obtaining a \$600 payment on a \$3,000 arrears may well reduce the exposure to bad debt considerably more than obtaining four \$150 payments on accounts each with \$150 arrears.

- If the utility is interested in reducing collection costs, it will want to focus its collection initiatives on preventive actions. Soft-core dunning directed toward late payers with small and recent arrears will generate payments that would prevent accounts from falling into an older aging bucket calling for a more intensive and more expensive collection effort. For example, outbound telephone calling that might prevent 60-day arrears from falling into field collections would help control collection costs even if it has a less significant impact on controlling bad debt.

MINIMIZING THE OVERDUE CASELOAD AND ARREARAGES

The need to control the size and composition of the payment-troubled caseload arises from the fact that not all instances of nonpayment are alike, in either nature or degree. From the perspective of managing collections costs, the definition of a “payment-troubled” customer to be identified for treatment by the strategies and practices of a customer assistance program must be based on a determination of whether and when customers will self-cure their nonpayment. Self-cure exists when a customer makes good his or her nonpayment in a reasonably timely fashion without labor-intensive intervention by the utility customer service department. Only if a payment is withheld for longer than reasonable and is not forthcoming on the customer’s own volition after receiving low-cost reminders by mail or automated phone systems, should the account be defined as “payment troubled,” and placed into the utility’s payment-troubled caseload for additional treatments that incur additional expenses.

Two characteristics are generally used to identify when a customer is not likely to self-cure and thus give rise to collection concern: (1) the age of arrears, and (2) the size of arrears.

- From an aging perspective, an arrears gives rise to concern when it ages to the point of threatening ultimate collection. For example, an arrears 60-days past due generally falls within this category.
- From a dollar perspective, an arrearage becomes a collection concern when it exceeds the cost of collection. Most utilities will not seek to collect an unpaid bill as long as the cost of collection exceeds the dollars subject to collection.

As a general rule, an unpaid account must meet *both* the aging test *and* the size test in order to be classified as being payment-troubled. Many utilities incorporate these concepts into a collection rule called a “treatment amount.” The treatment amount defines what overdue bill will generate a collection response by the utility. The age and size of the overdue bill comprise the two dimensions of what overdue bills merit collection. For example, a typical treatment amount might involve a 60-day overdue bill with a balance of at least \$100. If *either* the age *or* the dollar trigger is not met, no collection action occurs. As shown in [Figure 16.1](#), this dual trigger “treatment amount” excludes more accounts than it includes. It is meant to be, and serves as, a process for helping a utility target its collection efforts to focus on those accounts that will not likely self-cure.

	Does not exceed specified age	Exceeds specified age
Does not exceed specified dollar amount	Don't treat	Don't treat
Exceeds specified dollar amount	Don't treat	Treat

Figure 16.1 Identifying likelihood of self-cure by dollar amount and age of arrears

In sum, the first step in a strategy designed to shrink the caseload of overdue accounts is to define what account characteristics will be used to signal an overdue account. Overall, collection is directed only toward the account that is not likely to self-cure. If a customer will cure his or her nonpayment without utility intervention, collection activity devoted to that account serves no useful function.

An important set of additional steps is required in adopting this approach to defining the “payment troubled” caseload. First, the age and size of arrears that is relevant may vary by household income level, implying that the analysis is better applied at the level of subgroups rather than in the aggregate across the entire customer base. Secondly, the total process involves more than simply identifying which customers are overdue and unlikely to self-cure by the age and size of arrears. Other customer attributes must then be analyzed to determine the most effective choice of treatment for each case. A low- or fixed-income customer with a chronic history of payment problems will require a one-on-one work out via an extended payment plan and perhaps additional forms of assistance. But, a customer with a good payment history who misses two consecutive payments may represent a very different situation. Movement from good-paying to late-paying (or nonpaying) is a characteristic that is often associated with a change of circumstances which warrants a “crisis” program to provide targeted assistance to households that are suddenly confronted with issues such as job loss or illness.

MINIMIZING THE COST OF CASELOAD PROCESSING

One Wisconsin utility found in its study of the reasons behind nonpayment that the operational implications of these findings were extremely important. To the extent that utility management implied to frontline collection personnel that the utility’s response to rising arrears or losses would be to “get tough” by disconnecting more accounts, certain results were inevitable. Frontline credit personnel would probably choose to disconnect those among the 19% who saw themselves as helpless and *would not complain* (emphasis in original). Such behavior would produce the illusion of action (more disconnects) but no concomitant improvement of results (e.g., collection of money, reduced arrears).

A study of the reasons for nonpayment identified five major groups of nonpaying customers:

- Those who know exactly what they are doing, and will pay if faced with a threatened termination of service

- Those who have sufficient resources to pay, but lack the necessary money management skills to make it go as far as it should go
- Those who are in transition, either moving into (or out of) poverty
- Those who lack enough resources to pay their bills and are angry
- Those who lack enough resources to pay their bills and blame themselves for their situation

Based on its customer segmentation study, Wisconsin Public Service Corporation decided to focus intense customer service attention on a selected group of customers. The utility identified the relative time, effort, and resources devoted to collections, based on customer payment characteristics, as an exponential cost curve. It is at the far right hand side of that cost curve—where costs per accounts managed are the highest—that customer resources are also probably most limited.

The utility then divided its collection activities into three groupings:

- First, for roughly 80% of the accounts in arrears, the utility devoted “virtually no account management activity—rarely, if ever, receive a reminder.”
- Second, for 15% of its accounts in arrears, the utility pursued its traditional collection activity, escalating to ultimate service termination for nonpayment if appropriate.
- Third, for the remaining 5%, the utility provided “Customer Assistance Advisors” to help link the nonpaying customer with available community resources, to help provide life-skills (such as budget counseling) and to help provide problem-solving and decisionmaking skills.

Ultimately, Wisconsin Public Service Corporation added seven Customer Assistance Advisors to its customer service staff.

MINIMIZING REPEAT OCCURRENCES OF NONPAYMENT

As discussed at length in Chapter 15, there are a number of specific strategies and practices that can be applied with the intention of helping customers avoid repeat instances of nonpayment problems, they are not repeated here. It suffices to note that once a customer has been put through all or part of a utility’s process for dealing with nonpayment, the utility ends up with a significant amount of information about the account that may be extremely valuable in targeting further assistance to help the customer avoid or mitigate payment troubles in the future. Acting on this information after-the-fact may seem to just add to the total cost of processing the immediate incidence of nonpayment, but appropriate practices applied at this point could have long-lasting effects. By contrast, the conventional approach to collections that can lead to a seemingly endless cycle of disconnections and reconnections is a very expensive process that will continue in perpetuity unless something is done to break the cycle. After-care is therefore a potentially significant cost control strategy and, after all, the utility has obtained just the right information about the account—information that would be expensive to reproduce—to target the most relevant forms of follow-up.

ACCOUNTING FOR COSTS AND BENEFITS

In considering the optimization of the costs of a customer assistance program, it is essential to broaden the analysis to also encompass consideration of the benefits resulting from a program. This arises because of the issue of cross-subsidization between utility customers. The ideal in utility ratemaking is to charge each customer the cost of their own consumption of utility services—nothing more, or less. In a utility with a 1% uncollectibles rate, however, the costs of squeezing the uncollectibles rate down to such a low level through collections actions and the residual costs of bad debts to be written off must be absorbed as an additional cost to be spread across the entire customer base. Although it is not normally recognized as such, this amounts to a cross-subsidy wherein one group of customers is imposing costs that must be borne by all the others.

Various strategies and practices of a comprehensive customer assistance program, as described in this report, entail both direct subsidies to payment-troubled customers as well as indirect subsidies in the form of utility costs incurred in administering to payment-troubled accounts. These costs are more widely recognized as cross-subsidies. And, in some jurisdictions, such direct or indirect subsidies involved in the implementation of a customer assistance program may be prohibited by local or State laws.

The cost of collections and bad debt are generally accepted cross-subsidies because they are regarded as unavoidable costs of doing business. Ironically, customer assistance programs have been shown to be capable of producing more total revenue for the dollars expended (Colton 1991, Victoria 2005). This result is documented not only in the short-term, but there are also long-term cost reductions to be won by helping to break the perpetual cycle of nonpayment problems and providing a framework for continuous improvement of collections.

Cross-subsidies resulting from the conventional approach to collections are therefore avoidable to some degree. Customer assistance programs should be allowed to challenge the conventional approach to determine which type of cross-subsidy produces the best results in terms of overall net revenue. It must be noted, however, that assessment of the difference in avoided costs is a very narrow concept of the benefit derived from customer assistance programs. Whereas the conventional approach to collections aims only to resolve utility bill payment problems, comprehensive customer assistance programs achieve the same end while also delivering a broad array of additional benefits to the utility and the community. Provision of broader social benefits is another rationale that can be put forward to justify cross-subsidies. This typically requires a deliberate acknowledgement of the broader benefits and underscores the need for the utility to be mindful of these benefits in establishing program objectives and in measuring program performance.

CHAPTER 17

SUPPORT PROCESSES: LEGAL SUPPORT



Overlaying many of the strategies for assisting consumers are numerous legal and regulatory requirements. There are myriad Federal and State requirements (including constitutional requirements in some states), as well as local ordinances, that govern interactions between utilities, customers (especially residential customers), and third parties (such as billing or collection agents). It is neither feasible nor particularly useful to attempt to review all of these legal requirements here because laws, regulations, and ordinances change frequently. It is vitally important, however, for a utility

contemplating a change in practices to obtain experienced legal counsel who can determine the applicable legal requirements.

LIFELINE RATES AND OTHER DISCOUNT PROGRAMS

As a general rule, utility rates are required to be reasonable, not unduly discriminatory, and not granting an unwarranted preference to one group of customers over another (Phillips 1993, Goodman 1998). There is a reasonable question whether a lifeline rate or other rate discount program for a particular group of customers (low-income, elderly, or others with special needs) is consistent with the requirement that rates should not treat similarly situated customers in a disparate manner. Various State utility commissions and courts have come out on both sides of the issue (Rosenhouse 1984, Goodman 1998).

Courts and commissions with *disapproved* special rate discounts focus on the requirements that rates be “cost-based.” In contrast, courts and commission with approved special rate discounts focus on the requirement that discount preferences must be “undue” or “unreasonable” for them to be unlawful. It is not the case that all rates must exactly reflect actual costs. The question of whether a particular discount diverges from costs to the point of representing an “undue preference” is a highly specific determination not readily resolvable exclusively by reference to “the law.”

If a special rate has a purpose broader than simply to improve the affordability of bills to low-income customers, it is more likely that the rate will be approved as reasonable. State regulatory commissions have approved low-income discount rates not solely as social policy, but rather as sound business alternatives to a cycle involving the billing of unaffordable rates, followed by entering into unaffordable payment plans, followed by payment plan breaches, followed by yet additional unaffordable payment plans. Low-income rates are often seen as a way to interrupt this inefficient and ineffective collection cycle.

In addition to the general rule, however, there are several states that have enacted statutes that specifically authorize—or even require—utilities (in some instances only certain types of utilities) to adopt, or at least consider, special rates for low-income customers or other categories of customers. For example, Goodman (1998) discusses special statutes in California (requiring lifeline rates for electricity and natural gas), Connecticut (requiring the adoption of utility rate structures that do not “place an undue burden upon those persons of poverty status”), and New

York (exempting an initial block of electricity consumption from higher seasonal rates). Examples of State statutes (as of September 2008) that specifically authorize lifeline rates, discounted rates, or other assistance for low-income customers of water utilities are provided on page 97.

Moreover, even when a regulatory commission or court has decided that a low-income rate is not lawful, the utility must ensure that this remains the current State of the law. For example, Rosenhouse (1984) cites two decisions from the Colorado Supreme Court in 1979 that concluded it was unlawful for an energy utility to have a special rate for low-income customers. While this was accurate at the time of publication, the Colorado statutes were later amended to overturn the court's decisions and authorize the PUC to adopt such rates for electricity and natural gas utilities (Colorado Revised Statutes § 40-3-106).

It is important, therefore, for a utility to ensure that it is basing its decision on the current law that governs its State and service area. Statutes and ordinances are amended and judicial interpretations of the law change over time. Utilities in dozens of states have implemented some type of discounted rate program for certain categories of low-income or special needs customers (Saunders et al. 1998). It appears, therefore, that in many states concerns with the lawfulness of such rates have been resolved.

SERVICE REGULATIONS AND ABILITY TO PAY

The further a water utility diverges from decisions regarding rates, the greater the ability of that utility to take ability to pay into account in its decisionmaking. The resolution of arrears, for example, often involves the negotiation of deferred payment plans. In such negotiations, the utility not only “may,” but in most instances “must,” consider ability to pay in determining the reasonableness of decisions ranging from the size of a required downpayment to the length of the payment plan in months.

In addition, decisions on whether, or how, or how aggressively, to exercise collection processes may take ability to pay into account. Most utility regulations and procedures dictate, for example, when a utility “may” disconnect service for nonpayment. Few such regulations dictate when a utility “must” disconnect service for nonpayment. In such instances, the utility is enabled to disconnect service (“may”), but is not required to do so (“shall”). Under such circumstances, the utility may legitimately choose not to exercise the collection authority it has been granted (e.g., water utility extends long-term payment plan rather than disconnect service).

Finally, utilities sometimes need to take the special circumstances of low-income customers into account in order to prevent unreasonable discrimination. The use of commercial credit reports is illustrative of this need. Low-income customers disproportionately incur “bad” credit when they default on payments in a transaction involving some degree of seller culpability (e.g., misrepresenting credit terms, selling used goods as new). A failure to take into account such circumstances involving the poor may result in the denial of water service (e.g., for failure to pay a cash security deposit) due to a low-income household's refusal to pay for shoddy merchandise sold under fraudulent credit terms.

Not only the size of income, but the source of income illustrates the need of a utility to be wary of unintentional discrimination due to a failure to take income into account in a service related context. Some water utilities, for example, refuse to consider income from part-time employment as adequate to establish creditworthiness. A refusal to consider such income from part-time employment, however, has been found to result in discrimination against women.

As water utilities move into exercising discretionary service-related decisions, their latitude to consider a customer's ability to pay expands. A utility may, but need not, disconnect service for nonpayment. A utility may, but need not, require a cash security deposit. A utility must accept a payment plan downpayment of 20%, but may choose to accept a payment plan downpayment of 10%. A utility must offer a payment plan of at least six months, but may offer a payment plan of 15 months. None of these decisions will likely be found to constitute undue discrimination.

TARGETED CONSERVATION PROGRAMS AND OTHER SPECIAL PROGRAMS

Targeted conservation programs, or other types of programs, that are made available only to low-income or special needs customers could raise concerns of discrimination. The most direct way to address these concerns is to develop a broader conservation initiative that includes a suite of programs designed to assist customers with different requirements. That is, each particular conservation program does not need to apply to every customer, but each customer should have an opportunity to participate in at least one program (Beecher, Pekelney, and Chesnutt 2001). Within a full array of residential usage reduction programs, it is generally allowable to target special programs to the poor, if such programs are designed to overcome market barriers that might otherwise impede the participation of low-income households.

Many utilities' conservation programs recognize that a different funding structure is necessary for programs which serve low-income customers. For example, Cavanagh (1988) describes a California program where the utility will pay the entire cost of home energy conservation for low-income customers, but make only partial payments for programs that serve higher-income customers.

An earlier report by the same author describes a conservation policy from the Federal government's Northwest Power Planning Council that requires the Bonneville Power Authority to offer energy conservation programs targeted to low-income customers "that pay 100% of the actual cost of all structurally feasible and regionally cost-effective conservation measures." Programs designed for other customers, however, need only be designed to ensure cost-effective levels of participation without necessarily paying the full cost of the conservation measures (Cavanagh 1983).

Moreover, Colton and Smith (1993) suggest that utilities may have an obligation under contract law to help payment-troubled customers reduce consumption through conservation programs. While courts have not yet been asked to rule on this legal interpretation, it does raise the prospect of hampering a utility's efforts to collect unpaid bills from low-income customers unless a water utility has first taken specific steps to prevent or resolve arrearages.

CUSTOMER PRIVACY

Utilities need to be extremely careful when contemplating any type of relationship with independent contractors that involves the use of customer information. Care needs to be taken to ensure that they abide by all State and local requirements concerning the use and transfer of customer information (especially including telephone numbers; social security numbers; usage history; and income, credit, or demographic data) (Kristov 1997, Prevost 1999). Penalties for noncompliance can be severe. For example, in 2007 one energy utility paid a fine of \$995,000 to

settle violations of State consumer privacy laws because it “gave confidential information about thousands of customers to a marketing company” (Anonymous 2007).

As another illustration, an Arizona statute requires utilities to “establish reasonable procedures to protect against unauthorized or fraudulent disclosure of such [customer] records that could result in a substantial harm or inconvenience to any customer” (Arizona Revised Statutes § 44-1376.01). The same law also prohibits a utility from selling or attempting to sell any customer information “without the authorization of the customer to whom the record pertains.”

DEBT COLLECTION REQUIREMENTS

Rendering bills to residential consumers, imposing late payment charges (or early payment discounts) on those consumers, and collecting unpaid bills are subject to a variety of legal requirements. If a utility is regulated by a State public utility (or public service) commission, then the commission is likely to have detailed requirements for these activities. If the utility is owned and operated by a municipality, there may be ordinances that require particular conduct when billing or collecting payment from residents.

In addition to any State and local requirements, some utilities are subject to important Federal requirements: the Fair Credit Debt Collection Act (15 U.S. Code §§ 1692-1692p) and a series of Federal laws known generally as Truth in Lending requirements (15 U.S. Code §§ 1601-1666j). Collectively, these laws govern the extension of credit to, and the collection of bills from, residential consumers. They contain provisions that govern such matters as the required billing time period, dispute resolution procedures, disclosure requirements to consumers, practices that may not be used to collect debts, consumer privacy, among others.

Importantly, these laws exempt most *but not all* utilities from their requirements. For example, the Fair Credit Debt Collection Act does not apply to public utilities that are regulated by a State utility commission where the commission has adopted debt collection regulations. That law also does not apply to State governments or their “political subdivisions.” The latter provision would exempt municipal utilities from compliance with the requirements, but may not exempt other types of government entities, such as government authorities, government corporations, or water districts if they are neither regulated by utility commissions nor deemed to be “political subdivisions” of the State.

Similarly, the credit billing requirements of Federal law do not apply to “transactions under public utility tariffs” if a “State regulatory body regulates the charges” for service, late payment, or early payment. Again, it is important for a utility to understand whether it meets the criteria to be exempt from compliance with these Federal laws.

In addition, if a utility contracts with a third party to provide billing or collection services, the utility needs to understand whether its exemption from Federal requirements would be affected. Generally, a local government or regulated utility has a different status under Federal law than a third-party bill collector that is acting as an agent for the utility.

THE RELEVANCE OF STATE UTILITY COMMISSION REGULATIONS IN AN “UNREGULATED” ENVIRONMENT

While most private investor-owned water utilities are both rate and service regulated by State PUCs, many other water utilities do not fall under this regulatory umbrella. In particular, municipal water departments are often statutorily exempted from direct regulatory oversight by

State regulators. In some instances, water utilities that are not rate-regulated are nonetheless still service-regulated by a State commission. Issues such as whether and through what process service may be disconnected, under what terms payment plans for arrearages are to be offered, under what circumstances (and to what extent) cash security deposits may be imposed, and the like, are governed by State regulations even if the overall rates of the water utility are not.

Even when water utilities are exempt from direct State regulatory oversight, however, utility staff should be aware of the content of commission regulations. State commission regulations can serve as a standard by which local water utility actions (or inactions) are judged to be “reasonable.” In addition, State commission regulations can be viewed as an industry code of practice, which will be used to impute contract terms on issues that might arise which are not specifically addressed by local water utility rules.

State utility commission regulations may be referenced as a standard of care in reviewing whether local water companies are liable in tort for unreasonable actions as well. A utility is liable for damages in tort, for example, where the utility has acted unreasonably in disconnecting service, whether the utility has failed to provide reasonable notice, or where the utility has failed to provide reasonable alternatives (such as payment plans).

STATE LAWS AUTHORIZING ALTERNATIVE RATES, DISCOUNTS, OR LOW-INCOME ASSISTANCE

This section provides examples of State statutes (as of September 2008) that specifically authorize lifeline rates, discounted rates, or other assistance for low-income customers of water utilities.

California Public Utility Code § 739.8—Low-Income Water Ratepayers

(a) Access to an adequate supply of healthful water is a basic necessity of human life, and shall be made available to all residents of California at an affordable cost.

(b) The [Public Utility] commission shall consider and may implement programs to provide rate relief for low-income ratepayers.

(c) The commission shall consider and may implement programs to assist low-income ratepayers in order to provide appropriate incentives and capabilities to achieve water conservation goals.

(d) In establishing the feasibility of rate relief and conservation incentives for low-income ratepayers, the commission may take into account variations in water needs caused by geography, climate and the ability of communities to support these programs.

Massachusetts General Law Chapter 23B § 24B—Low-Income Sewer and Water Assistance Program

The department [of Housing and Community Development] shall, subject to appropriation, operate a low-income sewer and water assistance program to provide assistance in paying the sewer and water bills of homeowners earning less than one hundred and fifty percent of the FPL, as defined by the Federal government or homeowners who are eligible for one and two household fuel assistance program, so-called. Said program may be administered in coordination with the Low-income Home Energy Assistance Act, 42 United States Code sections

8621 et seq., or any successor acts thereto, subject to the following provisions: shall establish benefit rates and maximum benefits such that total benefits paid do not exceed the amount appropriated for this benefit;

(a) the department shall use the same grantee agencies, similar applications and similar verification procedures as are used in the Low Income Home Energy Assistance Program, to the maximum extent possible. The department may also utilize a reasonable percentage of any funds appropriated, not exceeding 10 per cent of such funds, for administrative costs of the program.

(b) the benefit level provided to any individual household eligible under this program shall not be greater than 25 per cent of the total annual water and sewer bill for the household; provided, however, that the department shall establish benefit rates and maximum benefits such that total benefits paid do not exceed the amount appropriated for this benefit;

(c) households which receive benefits under this program shall not unreasonably refuse to cooperate with any demand-side water conservation programs which are provided at no expense to the household by any local agency or authority.

New Mexico Low Income Water, Sewer and Solid Waste Service Assistance Act, New Mexico Statutes Annotated §§ 27-6A-1 to 27-6A-5

§ 27-6A-1. Short title

This act may be cited as the “Low Income Water, Sewer and Solid Waste Service Assistance Act.”

§ 27-6A-2. Purpose

It is the purpose of the Low Income Water, Sewer and Solid Waste Service Assistance Act:

- A. to assure that water, sewer or solid waste user rate increases do not force many low-income individuals to discontinue necessary water, sewer or solid waste service; and
- B. to increase the availability or affordability of basic water, sewer and solid waste service to low-income individuals by providing assistance to meet the cost of basic water, sewer and solid waste service.

§ 27-6A-3. Definitions

As used in the Low Income Water, Sewer and Solid Waste Service Assistance Act:

- A. “department” means the human services department; and
- B. “utility” means any individual, firm, partnership, company, district, including but not limited to solid waste district, water and sanitation district and special district, cooperative, association, public or private corporation, lessee, trustee or receiver appointed by any court, municipality and municipal utility as defined in the Municipal Code, incorporated county or county that may or does own, operate, lease or control any plant, property or facility for:
 - (1) the supply, storage, distribution or furnishing of water to or for the public;
 - (2) the supply and furnishing of sanitary sewer service to or for the public; or
 - (3) the supply and furnishing of collection, transportation, treatment or disposal of solid waste to or for the public. “Utility” does not include a public utility subject to the jurisdiction of the New Mexico public service commission.

§ 27-6A-4. Low income assistance rates

A utility may provide assistance in the form of reduced or subsidized rates to or on behalf of those individuals who meet the eligibility criteria of one or more need-based assistance programs administered by the department and who are not living in nursing homes or intermediate care facilities or not living in circumstances that do not require them to pay, directly or indirectly, for water, sewer or solid waste service.

§ 27-6A-5. Department cooperation

Subject to State and Federal statutes and regulations governing the sharing of confidential information, the department shall cooperate with a participating utility in identifying those persons eligible for assistance pursuant to the Low Income Water, Sewer and Solid Waste Service Assistance Act.

Texas Special District Local Laws Code § 7201.206—Rates and Fees for Services

(a) The district, in connection with water or sewer retail public utility services, shall establish lifeline, senior citizen, or minimum consumption level rates for services. The rate impact of such services shall be allocated on the basis of costs of services to achieve conservation principles, while securing necessary reserves for the payment of operating expenses, sinking funds, principal, interest, and debt coverage factors, and any other objective established by the district's annual budget.

Washington Revised Code § 36.94.370—Waiver or Delay of Collection of Tap-in Charges, Connection, or Hookup Fees for Low-Income Persons

Whenever a county waives or delays collection of tap-in charges, connection fees or hookup fees for low-income persons, or class of low-income persons, to connect to a system of sewerage or a system of water, the waiver or delay shall be pursuant to a program established by ordinance.

Washington Revised Code § 57.08.014—Authority to Adjust or Delay Rates or Charges for Low-Income Persons—Notice

In addition to the authority of a [water or sewer] district to establish classifications for rates and charges and impose such rates and charges, a district may adjust or delay those rates and charges for low-income persons or classes of low-income persons, including but not limited to, low-income handicapped persons and low-income senior citizens. Other financial assistance available to low-income persons shall be considered in determining charges and rates under this section. Notification of special rates or charges established under this section shall be provided to all persons served by the district annually and upon initiating service. Information on cost shifts caused by establishment of the special rates or charges shall be included in the notification. Any reduction in charges and rates granted to low-income persons in one part of a service area shall be uniformly extended to low-income persons in all other parts of the service area.

CHAPTER 18

SUPPORT PROCESSES: PERSONNEL TRAINING



Specialized training for customer service representatives (CSRs) is an essential element of best practice in responding to payment troubles of residential customers. The representatives benefiting from such education include any individual that might have personal contact with a customer on behalf of the utility. This includes call center representatives, field representatives engaged in collections, or the staff of front office functions in headquarters or regional offices. Depending on the nature of assistance programs there may be a need for advanced training of a select group of representatives in highly specialized functions such as negotiation of deferred payment plans. The description of deferred payment plans provided in Chapter 14 includes coverage of training elements relevant to this advanced task. However, all representatives who come in contact with payment-troubled customers should be trained to a level adequate to ensure sensitivity to customer needs and have a complete understanding of their personal roles.

It is first necessary to orient all staff to the significance of customer-payment assistance programs. It is important for everyone involved in the overall business process of providing assistance to understand the impacts of the program for affected households, the significance for the community, and the organizational and business benefits to the utility.

All involved staff must also have a broad familiarity with the overall structure and design of the strategies and practices comprising the customer assistance program. It is necessary, for example, to have a shared understanding of the manner in which the utility is intending to segment and target the payment-troubled segment of the customer base as discussed in Chapter 6. It is important to be able to rapidly and accurately classify different target subgroups as early in the case work as possible. In fact, there is a great deal riding on the readiness of utility personnel to be able to get the right type of assistance on the way to the customer as a result of the initial contact. Whether it be a troubled customer mustering the nerve to call customer service to ask for help, or a first outbound call from customer service to inquire about a late payment, it is important that the representative be capable of making the right classification of the circumstances during that first call in order to put appropriately targeted remedies into action. Such calls are viewed as difficult and potentially intimidating experiences for troubled customers, but they can truly help to turn the situation around. Effectiveness at the first point of contact cannot be stressed enough; it can make a huge difference in overall program effectiveness.

This classification skill involves “hearing” indicators of financial distress on the part of the customer during these key interactions. References, for example, to the need to make choices between competing needs (e.g., “I just *had* to get the car fixed this month,” “Maria could not go another month without seeing the dentist”) should alert the CSR to the potential that the customer has limited income and could benefit from a reference to public assistance. Customers may make references to illness, job loss, or disability, any one of which merits an appropriate referral to crisis assistance programs. The customer may directly mention participation in another program (“I *asked* LIHEAP for assistance, but they said they don’t pay for water bills”) or may

be more oblique (“when I stopped at State Street last week,” with “State Street” being popular parlance for the local community action agency). Customer service training should emphasize how to listen for indicators that can help classify different types of payment distress.

An additional step in staff training involves learning about the other Federal, State, local, and private community programs that might assist a payment-troubled customer in payment distress. Assume, for example, that a staff person is talking with a single-parent with two children in July. The parent notes the difficulty in paying for the children’s meals in addition to the summer water bill. The CSR should *know* that many low-income households lose access to nutrition assistance during the nonschool months—fewer than 20 of every 100 students who participate in the National School Lunch/School Breakfast program also participate in the summer food services program—and might suggest how to access that summer food services program and at what sites. A person noting their lack of income as a reason for nonpayment might receive references to the Federal Communications Commission (FCC) Lifeline assistance program that will help offset the costs of their local telephone service; the Federal LIHEAP that will help offset home energy costs; or the State Circuit Breaker program that will help offset the costs of local property taxes. The Federal (and State, if applicable) EITC program will place an average of \$2,000 in the pockets of the working poor, while the State Children’s Health Insurance Program (SCHIP) will help offset out-of-pocket health care expenses.

Beyond knowing about other assistance programs, best practice representatives should know the “how” and the “who” of how to access financial assistance. Customer service training should involve more than knowing that the payment-troubled customer might want to enroll his or her children in the free or reduced school lunch program. Research shows that even when individuals have knowledge about a program, they frequently lack what is called “effective knowledge.” “Effective knowledge” involves that information needed about how to access a program. The statement “yes, I know about LIHEAP” is *different* from the statement “yes, I know how to apply for LIHEAP.” A water utility CSR might be an important resource in conveying information not only on *what* to do, but on *how* to do it (“now, you call Mrs. Treisch at this phone number for the help that we talked about”). If the CSR cannot learn the various programs, that staff person should, at a minimum, learn how to access an internal database at the utility to quickly and accurately find the contact information. Work with low-income customers has revealed that the more personal the referral, however, the more likely it will be viewed as a genuine effort to help rather than a bureaucratic brush-off.

The benefit of such knowledge of outside sources of assistance on the part of the water utility staff goes far beyond simply supplementing the income of a customer that owes the water utility money to perhaps make it more likely that that customer might be able to pay his or her water bill. One common complaint by customers about utility CSRs is that the CSR “didn’t hear a word I said; she just wanted the money.” Such a relationship does not lend itself to developing a mutually acceptable mechanism for retiring an outstanding arrears. In contrast, receiving appropriate training on which programs best address specifically-identified problems, followed by a tailored response reflecting that the CSR “heard,” will enable the CSR to act as an effective partner able to problem-solve the unpaid bill and the circumstances leading to that unpaid bill.

Staff training should include teaching the CSR to notice cross-cutting issues within the utility’s overall customer assistance program. While a call center call may primarily be a collection or payment plan call, the staff person should know how to get the customer out of that collection silo if necessary. A comment that “Mrs. Smith, I notice that every summer you have high bills. Can someone from our conservation staff talk to you about water-saving strategies to

help control your bill during hot weather?” might not only help resolve the current problem, but might also help prevent future payment problems as well. In particular, looking for ways to insert usage reduction measures into collection activities is generally a win-win situation for both the utility and the customer. Usage reduction would not be the only cross-cutting action. An observation of regular high seasonal bills might, for example, generate a suggestion for budget billing. This process of cross-referencing other parts of the utility would, of course, require sufficient CSR training in issue identification to be successful.

To be particularly effective in bringing cross-cutting activities to bear on the resolution and management of current and future payment troubles, CSRs should be trained in pattern analysis. The job of the CSR is not simply to look at an account history to determine the most recent account balance (or the balance underlying the pending notice of disconnection for nonpayment). The job of a CSR is to *notice* things . . . patterns (or perhaps deviations from patterns) that will help inform and explain a nonpayment situation, lead to a resolution of that problem, and perhaps contribute to preventing a future payment problem. “Mrs. Mendez, I notice that about six months ago, your usage spiked. Do you want to talk to one of our service representatives about how to look for a leak to make sure that you’re not paying for water that is simply going down the drain?” “Mr. Jones, you’ve been a great customer for 35 years, but the last six months have been a challenge. Can I refer you to our local Community Action Agency that works with the budget problems of aging customers?” “Ms. Stein, you’ve always been a wonderful paying customer, but that two-month period last fall was a killer that you haven’t been able to get past. Can I refer you to a local fund that might be able to help you get that bill off the books so you can stop worrying about it?”

In each of these instances, the CSR looked not simply at the current balance, but at the account history as a whole to assess what might be going on. The underlying training was not simply of the need to do such an inquiry, but of the possible patterns to look for and the significance of particular patterns should they be found. It is the difference between reducing arrears and managing arrears.

Aside from the typical “people skills” required for a job such as being a CSR for a water utility—“people skills” involve, for example, the ability to be an active, empathetic listener—water utilities need to provide their CSRs with utility-specific skills-based training that leads to both the prevention and management of payment troubles. This training heightens awareness, promotes pattern identification, and facilitates the ability to make connections between needs and resources, and between payment patterns and life situations that might underlie those patterns.

CHAPTER 19

SUPPORT PROCESSES: INFORMATION TECHNOLOGY



Exploitation of IT can provide a significant boost to the effectiveness of customer payment assistance programs. Some of these support needs may seem to require tedious up-front work, or work that is sufficiently outside the normal domain of customer information systems (CIS) and may draw resistance from the owners and operators of these systems. Although a front-end investment—and some culture change—may be required to meet some of the needs of a comprehensive program, many of these adaptations require only a one-time change and are not difficult to maintain once in place.

Compared to the initial investment, the impact of customized IT support offers a payback that will extend year-after-year into the future.

CHARACTERIZING PAYMENT-TROUBLED CUSTOMERS

An important early step in a customer payment assistance program is the development of a broad characterization, or profile analysis, of the nature of payment problems within the community, encompassing analysis of related causative factors such as the incidence of poverty. While this is as much of an analytical task as an IT task, such analysis will need IT support in order to draw upon a diverse set of information resources both inside and outside the utility.

Two types of data are required to develop and refine a customer profile analysis: (1) customer account data and payment history data from the utility's CIS used for billing; and (2) community demographic, economic, and customer data from outside sources. The utility's own customer account data should be a source of significant insight into local patterns of nonpayment. Unfortunately, many customer data systems are designed so narrowly for the purpose of printing bills that they are notoriously limited in their ability to produce data for analysis. However, it is important to examine different patterns of nonpayment to ascertain whether there are some that are more or less prevalent within a community, at a given time of year, during depressed economic conditions, etc. The right data analysis is necessary in order to design the best intervention to bear on resolving each unique type of nonpayment problem.

In order to get the full picture, it is necessary to couple utility data with other information from outside sources. Many utilities have developed data sharing partnership arrangements with local social service agencies to enable merging of utility customer account information with information regarding eligibility for various low income assistance programs. Although such analysis may raise concerns for privacy, data from Federally sponsored programs is public information and it has been generally accepted that using it discretely to enhance targeting of allied assistance programs is beneficial (Colton 2005). Privacy concerns are addressed in the discussion of legal support in Chapter 17.

The evidence is clear that disconnection of utility services is much more prevalent in the low-income segment of the population than in the general customer base (Melbourne 2004, USDHHS 2004). Other sources of general information such as the US Census data should also be fully exploited to provide an understanding of the conditions in a community that might

contribute to nonpayment problems (Rubin et al. 2004). In addition to household income status, researchers have also documented that disconnections of utility service are highly correlated with customers experiencing medical disabilities (Accent 2007). Customers of advanced age and limited physical capabilities (e.g., hearing, mobility) or customers of different cultural origins and limited language capabilities constitute additional subgroups where specific circumstances can contribute significantly to instances of nonpayment and can thwart standard collections strategies that are insensitive to these issues.

In constructing a profile of payment-troubled customers, a utility will want to try to identify those combinations of nonpayment issues and causes that are most prevalent in order to prioritize the tailoring of treatments for the most important segments. Tables 19.1 and 19.2 illustrate the basic template for such a profile analysis. The task may seem overwhelming at first, but can be viewed practically as one of developing initial best estimates for the most important categories and continually improving those estimates over time.

MAINTAINING AND USING ACCOUNT HISTORY INFORMATION

Modern CIS can be configured to provide real-time account information to support customer service representatives (CSRs) while they are interacting with customers. Systems may need to have considerable additional dexterity in order to support the administration of payment plans and modified payment plans, tracking administrative actions and arrearages all the way through to the point of case resolution. Too often, however, systems are not configured to store this account information for later use and analysis—sacrificing a valuable information resource.

A CSR can be much more effective in dealing with the current incidence of nonpayment if informed of the details of prior bills and prior episodes of nonpayment. As part of an after-care strategy, a utility may want to mine this account history data as a strategy for developing tailored mailings of information regarding other community assistance programs.

Table 19.1
Profile of payment-troubled accounts vs. community data

Customer categories	Proportion of households in community	Proportion of utility's payment troubled accounts
Elderly head of household		
Disabled head of household		
Very low-income households (\leq FPL)		
Low-income households ($>$ FPL $\leq 2 \times$ FPL)		
Older housing		
Non-English speaking households		

Note: Column sums will $>$ 100%.

FPL: Federal Poverty Level.

Table 19.2
Multiple attribute profile of payment-troubled accounts

	Crisis conditions	Elderly head of household	Disabled head of household	Very low-income household	Low-income household	Older housing	Non-English speaking
Crisis conditions							
Elderly head of household							
Disabled head of household							
Very low-income household							
Low-income household							
Older housing							
Non-English speaking							

Many CIS are designed only to process bills and bill payment without recognizing that documentation of past bills and of the bill payment and collections process creates an information resource that can serve higher strategic purposes. If a utility is implementing a strategy of targeting customized treatments to address specific nonpayment circumstances, it is necessary to track results in the same categories as the targeting in order to assess how well the practices being applied are working. This requires maintenance of account history records as well as the ability to query those records in terms of key attributes. It also requires the ability to produce roll-up summaries across accounts within a category to provide aggregated assessments of what combinations of practices were applied and what outcomes were obtained without having to look through account histories one-by-one.

PERFORMANCE MEASUREMENT AND CONTINUOUS IMPROVEMENT

Chapter 22 presents a complete discussion of approaches to performance measurement and continuous improvement of customer assistance programs. It suffices to say that the development and refinement of performance measures to guide continuous improvement will depend very heavily on the ability to mine the account history data in the manner described above. If support for such analysis is not within the domain of the information requirements established for the CIS, it needs to be added. It represents a significant opportunity cost to either discard this information resource or leave it unutilized when it is so valuable to the improvement of customer assistance programs.

CHAPTER 20

SUPPORT PROCESSES: COMMUNICATIONS STRATEGY FOR CUSTOMER ASSISTANCE PROGRAMS



Because every water utility is unique, no single communication-planning model exists. Each plan must be based on a utility's history, its needs, risks, stakeholders, community, and many other distinctive factors. Other research reports provide more detailed guidance on strategic communication planning for water utilities (Jane Mobley Associates and Bond 2004, 2006). This chapter provides a simple overview of a strategic approach applied to customer payment assistance programs.

A communication plan creates and delivers consistent, appropriate, and managed messages that produce results aligned with a utility's overall mission and goals. Strategy ultimately defines how a communication effort reaches the intended audience with the right messages. A strategic communication plan should describe:

- What is to be accomplished?
- When will it be accomplished, by whom, and at what cost?
- What strategies will accomplish the goal?
- What actions or tactics will carry out the strategies?

This chapter outlines presents a typical approach to developing communications strategy for mass campaigns in support customer payment assistance programs. The activities listed under each step serve as a menu of tactics used by utilities. Water utilities can use this process to customize a plan that works best for their size, geographic location, resources, and customer demographics. It is important to note that this chapter relates only to mass communications efforts and does not encompass the very critical person-to-person communication that takes place between individual customers and customer service representatives (CSRs). This extremely critical communications link is discussed in many other places in this report, especially in Chapters 12 and 18.

The most significant desired outcome of mass communications efforts in support of assistance programs is making target subgroups of customers more aware and informed of both utility assistance programs and other social assistance programs for which they may be eligible. The objective is to convey critical information about how to get help with bill payment to the target subgroups of customers before-the-fact of nonpayment. Even in the energy sector where programs have been in place for 30 years, assistance sometimes reaches only a small proportion of eligible customers. The more that mass communications programs can prepare the way, the better. When target subgroups of customers know they can call customer service to get help with payment problems, the likelihood of favorable outcomes increases immeasurably.

This outline also does not attempt to package actual messages to these target audiences. It simply describes the overall process to follow as water utilities undertake to reach the target subgroups of customers with information to enhance understanding, awareness, and access to customer payment assistance programs.

OBJECTIVES

The communications objectives in support of a customer payment assistance program are likely to include the following elements:

- Increase general knowledge
 - Customers’ understanding of customer services and bill-paying process
 - Customers’ understanding of consequences of not paying bills
 - Customers’ understanding of consequences of how the water utility wants to help them avoid a shut-off
- Increase awareness of assistance programs
 - Customers’ awareness of water utility assistance program
 - Customers’ awareness of other assistance programs
- Improve understanding of utility assistance programs
 - Customer knows if the program is appropriate for them
 - Customer knows if they are eligible for assistance
 - Customer knows how to act on their knowledge
- Improve accessibility and acceptability of utility assistance programs
 - Customer can find out how to apply for assistance
 - Customer can do what is needed to apply for assistance
 - Customer is willing to do what is needed to apply for assistance
- Increase positive experiences
 - Customer is favorably impressed with the utility assistance program
 - Customer is better informed for next experience
 - Customer spreads positive report to others

AUDIENCE ANALYSIS

One outcome of 9/11, weather-related disasters, and recent disease emergencies is the increased the attention on planning and implementing practices to identify, locate, and reach vulnerable or at-risk populations. Whether in emergencies or normal situations, the communication process remains the same:

- Define the population groups in a community
- Learn what information sources they trust and access
- Use the most effective means and messengers to get information to them

One of the first steps in audience analysis is to define the target population. In the list presented here, utility communications staff will recognize the subgroups of customers targeted by a customer payment assistance program on which to focus the form and content of their outreach.

Broad demographic categories:

- Economically disadvantaged (low income)
 - Living at or below the Federal poverty guidelines
 - Living 150 to 200% above the poverty guideline
- Limited language competency
 - Limited or non-English speaking
 - Low literacy
 - Deaf and hard of hearing (also disability)
- Disability
 - Physical
 - Limited mobility
 - Visual impairment
 - Deaf and hard of hearing (also language competency)
 - Speech impairment
 - Hidden (epilepsy, arthritis, diabetes)
 - Medical (illness or injury that disrupts routine and makes work and life skills difficult)
 - Cognitive (developmental and learning disabilities, Alzheimer's, stroke)
 - Mental (mental illness, drug and alcohol abuse)
- Elderly
 - Frail
 - Disabled

Nonpayment categories:

- Before the fact—at risk
- Households in crisis
 - Job loss
 - Sudden illness or death of primary bill payer
 - Unexpected expenses or increases in basic household expenses, such as food or fuel
 - Other crisis
- Chronic late payer
- Repeat delinquent, history of shut-offs

A next logical step in audience analysis is to research the current perceptions and beliefs of members of the audience that may have a bearing on the approach to meeting communications objectives of the program. Focus groups are an excellent means of obtaining such insights. In the energy sector, customer perceptions found to inhibit participation in assistance programs include the following (Colton 1992):

- Lack of awareness about the program's existence
- Lack of awareness of how to apply for the program
- Lack of awareness of eligibility requirements for the program

- Belief that taking advantage of the program benefits would violate a “self-reliance” ethic, particularly evident among the elderly poor
- Perceived stigma of receiving public benefits (related to the preceding factor)
- Complex and overwhelming application process
- Perceived hostile attitude of those taking the applications
- Lack of transportation to apply for the program
- Lack of telephone to apply for program
- Language barriers facing a disproportionate number of low-income households
- Disproportionately lower educational levels attained by low-income households
- Mistrust of utilities by low-income individuals
- The requirement for initial outlays of money by the household in order to take advantage of the program

IDENTIFY BARRIERS TO COMMUNICATIONS

A communication barrier is anything that prevents a person or group of people from receiving, understanding, and acting on a message. The following list identifies communication barriers for:

- Economically disadvantaged
 - Education level or learning disability
 - Complacency or lack of interest
 - Low literacy or English language skills
 - Previous negative experiences with the utility (rudeness, unhelpfulness)
 - Lack of resources to respond to message
 - Misconceptions about eligibility
 - Lack of transportation to customer service offices
- Limited language competency
 - Inability to hear messages (deaf and hard of hearing)
 - Inability to read information and forms, or communicate verbally
 - Limited or no-English language skills
 - Low literacy
 - Limited Internet use
- Age vulnerable (65 or older)
 - Daily routines disrupted by lack of mobility or strength to carry out household tasks
 - Declining physical conditions, sight, hearing, mental acuity
 - Fear, sense of vulnerability
 - Lack of Internet access or use
 - Living alone
 - Perception of assistance as a handout

- Physical disabilities
 - Geographically hard to locate and reach as a group
 - Lack of transportation to customer service offices
 - Lack of Internet use
 - Sense of vulnerability
 - Limited sight, hearing, speech abilities
 - Impaired cognitive abilities
- Mental illness or cognitive disabilities
 - Daily routines disrupted by mental illness and disintegration of ability to live independently
 - Inability to assess short- and long-term consequences
 - Inability to respond to message, i.e., mental disruption in how messages are received and interpreted; inability to assess reality and make choices
 - Math and/or reading learning disability

IDENTIFY APPROPRIATE CHANNELS OF COMMUNICATION

In designing an outreach strategy, it is extremely useful to engage other organizations in the community that may already be in communication with the target subgroups of customers in order to learn what works and what does not work—as well as to explore partnering opportunities to reach these target populations with multiple forms of assistance.

- A water utility can send information directly to every ratepayer’s home or business through such traditional means as:
 - Bill inserts
 - Information printed on the bill itself
 - Water quality or Consumer Confidence Reports
- A water utility can also reach the community at large through:
 - Citizen Advisory Panel
 - Community events, such as festivals and fairs
 - Media articles and broadcasts
 - Newspaper advertisements
 - Public service announcements (PSAs) on television and radio
 - Newsletters
 - Web site content
- Other channels for reaching most audiences with messages about customer payment assistance programs
 - Bill payment and customer assistance information in welcome packet for newly connected residences
 - Community-based organizations (CBOs) and faith-based organizations (FBOs)
 - Community events, such as festivals and fairs, to hand out information about the water utility, bill payment process, and customer payment assistance
 - CSRs in shopping malls, community centers, schools, public health centers, student unions, and other places where identified audiences congregate

- Customer surveys with question about registering for special services
- Fliers
- Local chapters of national affinity organizations
- Posters placed in public places
- Radio
- Scheduled, free home visits
- Telephone/text telephone (TTY)
- Television
- Specific channels for people who live in poverty include:
 - Community-based social service network or center, such as a call center, which provides one-call application process for eligible low-income households
 - FBOs that offer emergency services or financial management programs
 - Income eligible assistance programs, such as LIHEAP, Temporary Assistance for Needy Families, and Head Start
 - A learning exchange (youth and/or adult) that offers classes on bill payment and assistance options
 - Meter readers or volunteers to distribute fliers about bill payment process and assistance in neighborhoods with higher-than-average levels of arrearages
 - Legal aid
 - Local public health department serving families with young children eligible for Medicaid or SCHIP assistance
 - Schools with a significant number of children who are eligible for free or reduced cost lunches
- Specific channels for people with limited language competency include:
 - English as a second language (ESL) teachers and classes
 - Ethnic restaurants, groceries, and other gathering places
 - Informational displays at government and neighborhood community centers
 - Local chapters of ethnic, racial, and tribal organizations
 - Local ethnic media to provide stories about bill payment process and customer assistance
 - Materials sent home with school-aged children
 - Phone calls (including text messages and TTY)
 - Resettlement agencies for recent immigrants
- Specific channels for people who are age vulnerable include:
 - Bill inserts
 - Councils on aging
 - LIHEAP
 - Meals on Wheels
 - Peer-group calling tree
 - Senior citizen centers
 - Trusted caregivers

- Specific channels for people with disabilities include:
 - Affinity groups and local chapters of national organizations
 - Drug and alcohol educators
 - Fax or email to receive and respond to customers with speech or hearing impairments
 - Internet (email and Web site)
 - Internet (software is available for people with visual impairment to convert printed messages to Braille)
 - Mental health centers
 - State associations and schools for the deaf and blind
 - TTY, an electronic device
 - Text messages
 - Training centers for people with developmental disabilities
 - Workshops for people with disabilities
 - Trusted caregivers

DEVELOP APPROPRIATE MESSAGES AND MATERIALS

Messages and formats need to be tailored to overcome specific communication barriers of different social groups:

- Limited language competency/literacy
 - Translate customer information, such as bill inserts, into the predominant non-English language in the utility's service area
 - Work with ethnic media to translate articles about bill payment and customer payment assistance
 - Improve Web site usability for low-literacy visitors
 - Simplify text
 - Put main point at the top of the page
 - Streamline page design
 - Develop picture guides about bill payment, water conservation, and customer payment assistance programs
 - Create and distribute refrigerator magnets with customer service telephone numbers printed on them
- Disabilities
 - Print material in simple terms that outlines services provided by the drinking water utility
 - Update Web site to meet Americans with Disabilities Act (ADA) standards for accessible design
 - Make available large print versions or cassettes with information on bill payment and customer assistance
- Age vulnerable
 - Emphasize benefits—allows older adults to stay in their homes, to live on their own, and to receive back what they paid into the tax system
 - Make available larger print versions of bills and bill payment information

MEASURE PERFORMANCE AND CONTINUALLY IMPROVE

Measurement is essential to determine if a utility's communication strategies are working. The measurements should assist utility management and communicators in making decisions about resources used to reach people with messages on bill paying and customer assistance. The measurements must align with the communication objectives by answering such questions as:

- Are the communication objectives being achieved?
- Are the communication strategies working?
- Are the tactics effective and cost-efficient?
- What needs to happen next?

Major strategies to follow in evaluating the performance of mass communications campaigns include the following:

- Measure results, not activities
 - Change in number of:
 - Customers applying for payment assistance
 - Customers in arrears
 - Inquiries about payment assistance program
 - Customer surveys
 - Focus groups
 - Interviews with representatives of CBOs, FBOs, affinity groups, government agencies, consumer groups
 - Number of community partnerships participating in communication efforts
 - Number of media inquiries, articles, broadcasts
 - Tracking responses
 - Call center
 - Customer feedback
 - Customer service telephone calls
 - Web site hits
- Measure awareness and understanding
 - Questions to ask in a focus group or survey about understanding
 - What does the customer know about the utility's bill-paying process?
 - What are the consequences of not paying a utility bill?
 - What is the utility's reputation for assisting people who cannot pay their water bill?
 - How accessible is the utility's customer payment assistance?
 - How flexible are customer service personnel in negotiating bill payment?
 - How does the customer describe experiences with the customer payment assistance programs?

- Questions to ask about awareness
 - How did the customer learn about the available customer payment assistance?
 - Does the customer know who is eligible for customer assistance?
 - Does the customer believe the program was appropriate for them?
 - Does customer know how to apply for assistance?
 - How willing was the customer to apply for assistance?
- Measure effectiveness and efficiency
 - Strategy issues for management to address in customer surveys:
 - What percentage of customers knows about the utility's bill paying process?
 - How has that number changed in a year?
 - What percentage of customers can recall information about
 - Bill paying process?
 - Availability of customer payment assistance?
 - Eligibility for customer payment assistance?
 - How did those numbers change in a year?
 - How many people were reached with a given activity?
 - What adjustments need to be made?
 - Budget issues for management to address
 - What is the cost per customer reached?
 - How much staff time is spent per customer reached?
 - How current is staff training on special equipment?
 - How realistic is the budget based on return?
 - What effect did efforts to increase customers' understanding and awareness have on bill payments?
 - What adjustments need to be made?

CHAPTER 21

SUPPORT PROCESSES: COMMUNICATING WITH VULNERABLE AND HARD TO REACH POPULATIONS



This chapter describes the importance of audience analysis and defines characteristics, communication barriers, and effective channels to overcome those barriers for vulnerable and at-risk populations—specifically, people who are isolated from the mainstream by poverty, language skills, disability, and/or conditions associated with aging. This may include working people who have moderate household incomes (\$25,000 to \$50,000 annually), but who are considered at risk of falling behind in their bill payments. As described in Chapter 6, this moderate income, at-risk group represents a much larger percentage of a water utility’s customer base than do chronic late payers. Effectively communicating with this at-risk group may prevent nonpayment and help reduce past due accounts. Other audiences of significance include people who represent, serve, or advocate for these special populations.

Studies of income-eligible programs, such as Medicaid, SCHIP, and LIHEAP, have identified common barriers to participation and clearly show the need for more effective or enhanced communication and outreach. The following barriers apply across most vulnerable and at-risk population groups:

- Lack of knowledge
- Lack of program awareness
- Access to program offices (transportation)
- Administrative hassles
- Misconceptions about eligibility
- Perception of assistance as a handout (Colton 2000; Kenney and Haley 2001; Kenney, Haley, and Dubay 2001)

Communication strategies for vulnerable or hard-to-reach populations often differ from mainstream strategies because of the barriers to receiving information and a lack of connectedness to the mainstream culture. Successfully identifying and reaching vulnerable and at-risk groups requires an understanding of who people trust as an information source, how they choose to get information (e.g., ethnic media sources, word-of-mouth through friends and family), and what motivates them to take action.

To identify communications strategies for target subgroups within a utility’s customer base, communication staff can start by asking and answering such questions as:

- Who can benefit from customer payment assistance programs?
- Whose behavior does the utility want to change or influence?
- Who influences the targeted population?

- Who can help communicate about customer assistance programs, e.g., media, employers, educators, or community-based organization (CBOs)?

The major subgroups of customers who share characteristics that render them at risk of nonpayment of water bills are the same as those for customers who experience barriers to mainstream communications. Consideration of these broad categories can help utilities to frame an effective and manageable communications strategy. Applicable subgroups include the following:

- Economically disadvantaged
 - Living below, at or slightly above, the national poverty guidelines
 - Medicaid recipients
 - Working families with young children
 - Recent immigrants
 - Living on fixed incomes
- Limited language proficiency
 - Immigrants/refugees
 - Limited or non-English speaking residents
 - Low literacy groups
 - Aging adults with dementia or loss of sight and hearing
 - Deaf and hard of hearing
- Elderly
 - Frail elderly
 - Senior citizens (age 65+)
- Disability
 - Medical
 - Short-term illness, injury
 - Catastrophic illness, injury
 - Hidden illnesses (diabetes, epilepsy, arthritis, etc.)
 - Physical
 - Limited mobility
 - Deaf and hard of hearing
 - Visual impairment
 - Speech impairment
 - Cognitive
 - Developmental disability
 - Learning disability
 - Stroke
 - Mental
 - Mental illness
 - Dementia, Alzheimer’s disease
 - Alcohol and substance abuse

ECONOMICALLY DISADVANTAGED

Many hard-to-reach populations live at or below Federal poverty guidelines. For a family of four, the Federal poverty point is \$21,200 (USDHHS 2008). The US Census estimated that 36.5 million people lived below Federal poverty guidelines in 2006 (US Census Bureau 2006). Another report estimated that about 10 million households that pay water bills have incomes of less than \$20,000 (Rubin 2005). A majority of the communities served by large utilities have a percentage of individuals living in poverty at least equal to or in excess of the national average of 11.76% (US Census Bureau 2000).

This subgroup includes households with incomes at 150% to 200% of the Federal poverty guideline. For a family of four, this would include families with \$31,800 to \$42,200 annual incomes (USDHHS 2008). One-third of households with young children have incomes that fall within this range. They are what is often described as the “working poor,” who don’t earn enough to cover ordinary expenses. Some of these families receive assistance from Federal and State programs, but they are not always able to keep up with the cost of living. During difficult economic times when rising fuel prices cause food bills to escalate, when a plummeting stock market causes jobs to disappear, or when serious illness results in unexpected expenses, these working families have no cushion and are at risk of falling behind in bill payment (Zedlewski, Chaudry, and Simms 2008).

The 2008 Energy Costs Survey showed that many households tried to keep their energy bills down by closing off rooms, setting temperatures at uncomfortable levels, or simply leaving the home because it was too hot or too cold. Nevertheless, 29% of low-income and 20% of moderate-income households either did not pay or only paid a portion of their monthly energy bills. They were also often behind in credit card payments, mortgages, rent, and car payments (NEADA 2008).

Communication Barriers

Poor access to information, learning disabilities, and low-literacy or language skills all create potential communication barriers for individuals and families living in or near poverty. One of the biggest outcomes of these barriers is an apparent lack of awareness of possible consequences to their welfare and the well-being of their family if, for example, the water is disconnected and the family is then evicted (Jane Mobley Associates and Simon 2006).

A report on debt and disconnections in the United Kingdom (Accent 2007) cited the following as barriers in low-income and nonpaying customers’ ability and willingness to communicate with the utility:

- Any perceived rudeness, general unhelpfulness, or lack of understanding was seen as rationale for no future effort to contact the utility
- Time factors, such as being put on hold, delays in answering the phone, particularly among those with pay-as-you-go phone contracts
- Feelings that the utility has been particularly unhelpful, such as a poor record of responses, or a sense that the customer service representatives (CSR) was reading a script rather than conducting a conversation
- Lack of understanding of individual circumstances
- Threatening tone of disconnection letters leading to feelings of helplessness and distress

Overcoming Communication Barriers

Identifying where a community has concentrations of people living in poverty is a critical step in targeting those vulnerable or at risk of nonpayment of water bills. Mapping poverty as a baseline is a good starting point. Metropolitan planning organizations frequently provide community-mapping services and base maps on the most recent census data.

People who are economically disadvantaged can be reached through traditional communication channels, particularly radio and television. PSAs about customer payment assistance can reach many other audiences as well, including friends, families, and those who can influence people with low incomes.

More targeted approaches may also be needed. One such approach is to team with trusted individuals in human service agencies, other city departments (e.g., neighborhood services), public housing authorities, schools, neighborhood community centers, and faith-based organizations (FBOs) to help get information to ratepayers. These individuals and organizations can play an intermediary role to disseminate:

- Notices about how to apply for assistance
- Information about where to get financial help if struggling to pay bills or facing water disconnection
- Fliers about the billing process, conservation, and assistance programs
- Posters about the drinking water utility's customer payment options

LIMITED LANGUAGE PROFICIENCY

According to the 2000 US Census, 3 million households could be classified as having limited language proficiency. More specifically, 21.3 million people who spoke a language other than English said they spoke English less than “very well;” more than half of these were Spanish-speaking adults (Bergman and US Census Bureau 2003).

This population segment includes people who:

- Are limited English proficient (LEP)
- Have low literacy skills or are not literate in English
- Have certain cognitive or sensory disabilities

The number of people who spoke a language other than English at home grew by 38% in the 1980s and by 47% in the 1990s. The number who spoke a language other than English at home more than doubled (Shin, Bruno, and US Census Bureau 2003).

In addition, the 2003 National Assessment of Adult Literacy determined that 13% of all adults in the US—or 30 million people—had below basic prose literacy, meaning they could not do much more than sign their name or read a simple form. Another seven million adults were considered nonliterate in English; four million more could not be assessed because of language barriers (Institute of Education Sciences, US Department of Education, and National Center for Education Statistics 2005).

Individuals who have developmental disabilities, learning disabilities, hearing or speech impairments, mental illness, or visual impairments may also experience limited language

proficiency. Although many of these individuals have support systems to help them with life skills, such as bill payment, others live independently, including many aging adults who often lose language competency due to dementia, loss of vision and hearing, and other medical conditions (Jane Mobley Associates and Simon 2006).

While many non-English speaking people establish homes and find work, a significant percentage still have incomes below or slightly above Federal poverty guidelines, which puts them at risk of not paying their water bills.

Depending on the geographic location, languages other than English can vary widely. However, Spanish represents the largest non-English language group in the US with an estimated 9.2 million households, of which an estimated 2.3 million are considered to be linguistically isolated (McGovern, Griffin, and US Census Bureau 2003).

States in the South and West contain the highest representation of Spanish-speaking individuals. Many large urban water utilities located on the coasts have non-English speaking populations considerably greater than the national average of 18% (US Census Bureau 2000). Because these are all metropolitan areas, the actual number (rather than percentage) of non-English speakers is significant. For example, New York City recorded 3.6 million non-English speaking residents or 44.39% of its population in the 2000 US Census.

Communication Barriers

Communication barriers experienced by those who have limited language proficiency may seem obvious, but the strategies to overcome them are not always apparent to water utility management. Drinking water utilities will need to look beyond the translation of materials and explore cultural differences that influence how different groups trust “the government or authority” and address the need for qualified intermediaries in the delivery of information. They also will have to consider alternative ways to reach people who have low-literacy skills or other difficulties in reading and understanding even the simplest documents. People with language barriers often ignore written materials and do not view it as “true” communication with the utility (Accent 2007).

While the Web has become an increasingly popular method of communication, individuals with low-literacy skills use the Internet very differently than higher literacy users. The most notable difference is that low-literacy users do not scan text, but read word-for-word. They have trouble navigating, scrolling, and searching Web sites and often skip over large amounts of text. As a result, they often make decisions based on limited information (Nielsen 2005).

Researchers have found that a smaller percentage of Latinos in the US use the Internet when compared to the non-Latino population. Approximately 56% of Latinos use the Internet compared to 71% of the non-Latino Caucasian population (Fox and Livingston 2007). Other studies have found that there is a tremendous disparity in Internet use by income and education level (Madden 2006).

Other communication barriers can be caused by cultural differences within ethnic, racial, tribal, and national groups in terms of how they receive information, their dialects, and ways of doing business and running a household. For example, Hispanics and Latinos define themselves according to national origin because they speak different dialects and have distinct cultural practices. Considerations such as these must inform development of water utility communication programs.

Overcoming Communication Barriers

A plan to identify groups of individuals with no- or limited-English proficiency (including those with very low literacy levels) will yield one subgroup—Limited Language Proficient—that consists of many individuals with similar communication challenges. Effectively, their main communication barrier is simply language proficiency and, therefore, many of the strategies for adapting messages can be the same for all members of this subgroup even if their limited proficiency arises from different factors.

The importance of ethnic media in reaching people who speak little or no English cannot be overemphasized. Every day, 25% of the adults in the US use ethnic media; for many, it is the only media they use (Jane Mobley Associates and Simon 2006). One water utility considered one of its more successful grassroots programs to be the placement of advertisements in ethnic and foreign language weekly newspapers.

LEP populations have a strong preference for face-to-face communication, particularly from people whom they already know and trust, such as community service providers. A utility might consider augmenting written materials with phone calls or free home visits that are scheduled in advance. Schools are also integral to communicating with this group because they have established relationships with the LEP population and existing communication systems.

Water utilities can print all information, including bills, bill inserts, and shut-off notifications, in English and in the predominant foreign language in the community, as well as on an audiotape. A more cost-efficient approach could be to develop picture books or guides that provide information about conservation, bill payment, and customer payment assistance.

Research for a previous Water Research Foundation study found that African American and Hispanic water utility customers placed significantly more value than Caucasians on displays at government centers, booths at local events, and information sent home with children (Tatham, Tatham, and Mobley 2004). One way water utilities can maximize this preference would be to find trusted individuals in human service agencies, schools, community centers, and FBOs who can distribute:

- Appropriately translated brochures or flyers about the billing process, conservation, and assistance programs
- Picture-based guides about water conservation, bill payment, and customer payment assistance
- Notices about when and where customers can get help if they cannot pay their water bill
- Refrigerator magnets with customer service numbers on them (Jane Mobley Associates and Simon 2006)

Other methods of reaching this population include using the ESL network that provides trusted communicators for many non-English speaking people. Other trusted individuals or groups include:

- Employers
- Ethnic restaurants and grocery owners
- Programs that provide translation services
- Schools

ELDERLY

Many large utility communities have a percentage of people aged 65 or older that exceeds the national average of 12.05% (US Census Bureau 2000). Nationally, the number of people older than 65 grew by 12% between 1990 and 2000, with the greatest increase occurring in the age 85 and older group. Federal statistics estimate that the number of senior adults (65 and older) and, in particular, those aged 75–84, will continue to increase dramatically in the next few years as the baby-boom generation ages (US Census Bureau 2000). By 2050, 25% of the US population will be elderly (US Census Bureau 2008).

Information about the economic status of older adults is not well documented. The number of older adults in poverty has declined significantly since the 1960s, but the poverty thresholds set in 1963 do not reflect spending patterns of older adults, especially when it comes to their resources and their healthcare expenses. Alternative poverty measures that account for health spending produce higher poverty rates than census numbers. Adults 85 and older are particularly hard hit because they have little housing equity or financial assets (Butrica, Murphy, and Zedlewski 2008). Confronted with higher prices for gas and energy, prescription drugs, groceries, and housing, seniors living on a fixed income can be at risk of not paying their bills.

Communication Barriers

Age alone does not classify individuals as part of a vulnerable or at-risk population. However, some individuals over the age of 65 possess certain characteristics, such as lack of strength, limited mobility, or susceptibility to disease that can label them as “frail elderly.” A significant number of people over the age of 65 also have a disability (primarily mobility and sensory, but also cognitive and mental), which can make them more vulnerable or put them at additional risk of falling behind in bill payment. An estimated 10 to 15% have mild to moderate memory loss and about 5% experience dementia (Jane Mobley Associates and Simon 2006).

Existing disease or disability, limited mobility, and fear and frustration from living with physical and economic challenges can prevent some senior adults from understanding and responding to messages about customer assistance. Older adults, in particular, perceive financial assistance as a handout and, therefore, are reluctant to apply (Colton 2000).

People who are homebound because of physical or cognitive issues are harder to communicate with than most other groups of older persons (Jane Mobley Associates and Simon 2006).

Overcoming Communication Barriers

Most people over the age of 65 can be reached through traditional channels, such as television and radio and printed materials. In fact, seniors are more likely to read information on bill inserts or in newspaper than any other age group (Tatham, Tatham, and Mobley 2004). Some senior adults, however, have hearing, sight, speech, and cognitive impairments that can prevent them from understanding and responding to information from their drinking water utility.

Effective strategies for reaching seniors include:

- Distribute information about billing, conservation, and customer payment assistance through trusted caregivers (such as visiting nurses and home health agencies), family members, senior centers, councils on aging, meals on wheels programs, and neighbors.
- Print monthly messages on bill inserts about how to save money and what the water utility is doing to keep costs down.
- A senior citizen calling tree, in which participants call each other in their community, also can be an effective outreach tool.
- Arrange for customers who feel vulnerable to choose a password to be used when utility personnel visit or talk with them. (Connect with energy or gas companies in the area that may offer a similar password system.)

DISABILITY

This population includes people who have physical, mental, sensory, or cognitive limitations. The ADA describes a disability as a condition that limits a person's ability to function in major life activities—including communication—and which is likely to continue indefinitely, resulting in the need for supportive services. The ADA definition of disability does not distinguish between type, severity, or duration of a disability.

More than 51 million people in the US have some level of disability. Of these, 32.5 million have a severe disability that may affect their capacity to work; in fact, only 13% of people who have severe disabilities are able to work fulltime year round (US Census Bureau 2000).

Although 9% of persons with severe disabilities live in households with incomes above \$80,000, the median income for persons with a severe disability is \$12,800, just slightly above the 2008 Federal poverty guideline for a one-person household.

People with disabilities are usually concerned about their health issues or the things that cause them to have special needs. They expend much of their energy in compensating for the factors that set them apart, and naturally attempt to cope or adjust. While most people with disabilities do not dwell on their challenges, they feel more at risk than nondisabled people because of their circumstances (Jane Mobley Associates and Bond 2004). Their vulnerability is real and can be exacerbated by unexpected circumstances, such as loss of a caregiver, loss of income, or acute illness. If these or other unexpected circumstances upset a person's daily routines, there may be a general disintegration in their ability to organize and follow through on activities associated with independent living.

Communication Barriers

Individual disabilities, or multiple disabilities, may present different types of communication barriers and require different methods to reach individual customers. Those who face obvious communication barriers include people who are:

- Blind and visually impaired
- Deaf and hard of hearing
- Developmentally or learning disabled

- Speech impaired
- Seriously mentally ill

Less apparent disabilities that can influence how people receive and act on messages may include primary bill payers who are or become ill or injured to the extent that work and life skills are difficult or impossible to carry out, or who are challenged daily by “hidden” or chronic illness, such as diabetes or arthritis.

People with disabilities who are not in an institutionalized setting tend not to live in clusters, making them isolated and difficult to identify and reach. As a group, they are very difficult to map; some utilities have tried a voluntary registry for people who need specialized assistance in bill payment and customer service, but getting people to sign up for a registry—even for emergency services, such as fire or police—has proved difficult. Also, utilities may not have the staff and other resources necessary to update and maintain a registry.

Mental disabilities are considered to be the most challenging special needs because people who cannot understand and/or follow directions potentially jeopardize themselves and those who depend on them. The National Alliance on Mental Illness (NAMI) defines mental illness as a medical condition that disrupts a person’s thinking, feeling, mood, ability to relate to others, and daily functioning and can result in a diminished capacity for coping with ordinary routines. NAMI estimates serious mental illness affects one in five American families annually.

Mental illness and other cognitive disabilities can disrupt how information is received; the ability to sequence information; the ability to assess reality and make choices and take action consistent with reality; and the ability to assess short- and long-term consequences.

Web sites and electronic communication will not be the most effective means of reaching people with disabilities. Nationally, only 29% of disabled persons aged 15–64 years use the Internet (US Census Bureau 2000).

Overcoming Communication Barriers

In general, people with disabilities can usually be reached through traditional means, such as television and radio, newspapers, brochures, and bill inserts. In reaching people with disabilities, utilities may also consider using the following approaches:

- Communicate availability of special adaptive services, such as Braille, audiocassettes, and TTY devices to intermediary groups, CBOs, and FBOs, and local chapters of national organizations
- Contact organizations that can be conduits of information, such as affinity groups, which are organizations where people with similar disabilities create a social and information-sharing community
- Use bill inserts or printing on bills, customer surveys, radio PSAs, or fliers to invite customers to register their request for special adaptive services
- Include information about adaptive services in information packets given to residents of newly connected homes
- Make sure utility customer service offices offer Braille signage and signing or assistive devices for customers who are deaf
- Reach out to local chapters of national organizations, such as NAMI, United Cerebral Palsy, National Federation of the Blind, Alcoholics Anonymous, and Disabled Veterans

- Update utility Web site to meet ADA standards for accessible design

For customers who have visual impairments, a utility can use large print versions of information, cassette recordings, or radio announcements.

For customers who have hearing and speech impairments, a utility can:

- Make arrangements for communicating with people who are deaf and hard of hearing or who have speech impairments, such as a TTY device.
- Use email or fax communication to reach and respond to customers with speech or hearing impairments.
- Develop picture guides for bill payment or customer assistance information for people who are deaf and hard-of-hearing or who have learning disabilities.

For customers who are mentally ill, cognitively disabled, or physically unable to manage household accounts a utility can:

- Print materials about water utility services in the simplest terms.
- Allow customers to assign bill payment to a trusted caregiver or family member who would also be the first contact about nonpayment issues.

Many within this last group, such as persons with developmental disabilities, may have case managers or trusted caregivers to oversee personal and household accounts.

ENGAGING OTHER AUDIENCES

Previous research has shown that customers consider some of the most useful information a water utility can provide to be about billing, specifically how fees and rates are determined. Only information about water safety and service disruption rated higher with customers (Tatham, Tatham, and Mobley 2004). General communication on billing issues should include messages explaining how a water bill is calculated, whom to call for questions, and where to apply for payment assistance.

Communicating this information to influencers, such as caregivers, friends, family, employers, trusted community leaders, and faith-based representatives, will help spread the word to other customers who may be more difficult to reach. These audiences want their local water utility to address the needs of all customers fairly and responsibly. Communication to them about bill payment and assistance will help them understand the challenges a water utility faces in bill collections (as well as with disconnections), and will build public support for future capital needs (Mobley et al. 2006). These general audiences can include:

- Representatives of CBOs, such as:
 - United Way and funded organizations
 - American Red Cross
 - Multi-cultural community centers
 - Ethnic and racial minority organizations
- Representatives of FBOs such as:
 - Salvation Army

- Catholic Charities
- Lutheran Social Services
- Trusted community leaders
- Elected and appointed officials
- Businesses, such as
 - Employers of target audiences
 - Owners and managers of ethnic groceries and restaurants
 - Operators of daycare centers (child and adult)

Effective outreach to specific audiences is possible when drinking water utilities integrate the knowledge and skills of other government and local public service providers, CBOs, and FBOs toward enhancing understanding, awareness, and action. This is an arena where water utility management can take a leadership role by either initiating or joining collaborations and working with partners in public health, CBOs and FBOs, and others to help address health, financial, and cultural needs of vulnerable populations.

The following list is adapted from the principles of community engagement for the Centers for Disease Control and Prevention. The work has been used nationally and internationally to guide agencies in the community engagement process.

- Be clear about the purposes or goals of the engagement effort and the populations you want to engage.
- Learn about the community in terms of its economic conditions, political structures, values, demographics, history, and experience with engagement efforts.
- Go to organizations and agencies that are serving the target populations, specifically those that offer payment assistance programs. Establish relationships, build trust, work with the formal and informal leaders, and seek commitment to create a process for partnerships.
- All aspects of community engagement must recognize and respect diversity. Awareness of the various cultures in a community must be paramount in designing and implementing engagement approaches.
- Community collaboration requires long-term commitment by the engaging organization and its partner.

EXAMPLES

Blanket Approach

Salt Lake City HEAT (SLCH) defines itself as Utah’s version of the Federal LIHEAP. Funded 100% by the HHS, SLCH provides payment assistance to low-income households, including people who are elderly (27%), disabled (44%), and families with pre-school aged children (households at or below 125% of the Federal poverty line). Services are contracted through local Community Action Programs, Association of Government Agencies, and other nonprofit entities that take applications directly. This agency does not process applications for assistance.

SLCH used a “blanket approach” to communication that resulted in 40% of the eligible population accessing services. Communication channels included the Web, brochures, outreach

organizations, newsletters, media releases, and posters placed with CBOs and FBOs. Few households sought assistance through the Web. For families with children age six and younger and for the disabled, representatives from public assistance organizations frequently made referrals. Bilingual representatives are on staff at SLCH.

The affiliation with LIHEAP did not affect the incidence of nonpayment because incomes did not change and utility rates increased. In Salt Lake City, the Red Cross coordinated a payment assistance program with the water utility.

Language Barriers

The Family Service Center of San Francisco is an example of how drinking water utilities can partner with community organizations to get the word out about customer assistance options to people who otherwise might not receive, understand, or trust material disseminated by the utility. In San Francisco, English language competency is a significant barrier with many different nationalities and languages such as Korean, Spanish, Chinese, Japanese, Mandarin, and numerous African languages. To help reach these different groups, the Family Service Center, a nonprofit social service agency for the city and county, offers 34 programs in 11 languages and serves a wide range of ages, races, ethnic minorities, and economic backgrounds. This center does not provide assistance, but helps people with housing and rehabilitation and fills the roll of trusted communicator among these diverse populations.

Keeping It Simple

Akron Summit Community Action, Inc., the principal anti-poverty social service agency for Summit County, Ohio, found that simple techniques to reach people work the best:

- Placing information about programs inside utility bills (EITC information has been included in water bills).
- Sending news releases to mainstream and ethnic outlets at the beginning of the year to alert customers about a call center where appointments can be made 24-hours a day.
- Spreading the word about available programs and requirements through word-of-mouth also plays a significant role.

Community Collaboration in Assistance Programs

An excellent example of community collaboration is the \$1 Energy Fund, a program sponsored by 18 electric, gas, and water utilities in New York, New Jersey, and Pennsylvania. The \$1 Energy Fund found a call center approach (800 number) was its most effective outreach. Sponsoring utilities can automatically transfer callers to the center or enroll target users 24 hours a day via the Internet. Community partnerships with 160 different CBOs are a vital piece of \$1 Energy Fund's approach to providing a holistic approach to serving clients in need. The services these organizations offer provide solutions to issues above and beyond utility bill payment trouble and are essential to allowing the client to move along the path to self-sufficiency.

The \$1 Energy Fund's call center staff included persons who benefited from the program themselves and had been trained as CSRs. Their holistic approach includes after-care to address

recidivism with referrals job training and employment opportunities, offered after a household received utility assistance. Other key partnerships included companies with call centers, such as banks, healthcare providers, and other utilities, that provided job search assistance for their customers as well.

The \$1 Energy Fund offers gas, electricity, and water assistance in the form of grants, discounted monthly service charges, water-saving devices, and conservation information. Program funding comes from customer donations matched by corporate contributions from participating utilities.

Awareness of Programs and Eligibility

Feedback from food banks and pantries to the Food Research Action Center (FRAC) led Congress to create the Summer Food Service Program (SFSP) for children in 1968 after agencies had noticed a sharp increase in requests for assistance during summer months. FRAC is a leading national nonprofit organization whose goal is to impact public policies and public-private partnerships that address hunger and under-nutrition in the US. Information is sent to every State. FRAC has identified “target states” with low participation and continues to work with them through grants.

Although addressing an urgent need, FRAC reported that the summer nutrition program was underutilized in every State. The reasons were varied:

- Families were not aware of the assistance
- Families were not aware they qualified
- No other summer activities drew enough children to justify the program
- Rural locations brought special transportation issues with travel distances and money for gasoline presenting problems
- Schools did not want to open in the summer

To increase participation, FRAC targeted schools, parks and recreation departments, and community centers for program development, and then worked with State and local partners to alert individual families and children regarding program availability, such as putting fliers in backpacks. In Wisconsin, a State group (as part of a larger media campaign) successfully used volunteers to canvass neighborhoods with information about SFSP. The best outreach was at the local level with food agencies involved directly with recipients; the challenge was in finding the right groups to reach.

Email blasts followed by focus group activities proved to be the most effective communication strategy to identify and reach appropriate groups. FRAC also included information in utility bills and worked with area companies in displaying ads and posters.

Promoting Other Assistance Programs

Making people aware of other types of assistance programs can make a difference in their ability to pay a utility bill. EITC, for example, asked utilities across the nation to provide information to their customers about EITC, which, in turn, would help low-income working individuals and families who qualify to receive a Federal income tax refund. The refund does not

affect eligibility in other income-based programs. According to the IRS, in the 2006 tax year, 22.4 million people received \$43.7 billion in refunds.

The EITC outreach campaign was created in 1975 through the Center on Budget and Policy Priorities (CBPP), a foundation-funded, nonprofit research institute. The Center's tax campaigns were in response to the government's increased interest in moving individuals to employment, the substantial tax burden to low-income earners, and the limited number of mechanisms to ensure that workers knew about available credits.

EITC targets were advocacy organizations and their affiliates, such as United Way, Head Start, churches, unions, chambers of commerce, and utilities, which learned about CBPP assistance from workshops, national conferences, the IRS, and Web sites.

CBPP mailed about 7,000 information kits annually with both retail and organization-level materials. A "Top 10 List of Things Utilities Can Do to Promote EITC" recommended customer contacts just before April 15 with newsletters, bill inserts, billboards, and electronic media. The Web version of the kit proved to be effective with an added benefit that families could compute the EITC online, a feature that is not available through other media.

Reported obstacles to program implementation included a lack of staff time and focus, lack of funding resources, and the inability to connect with partners who could collaborate. CBPP provides client groups with lists of potential community organizations. EITC advises organizations to start small, do what is possible, and find others to share the load.

Coalitions

A nonutility program, Covering Kids & Families (CKF) is a national initiative of the Robert Wood Johnson Foundation whose focus is to reduce the number of eligible, but uninsured children and adults who qualify for Medicaid or the SCHIP. CKF works through more than 5,500 coalitions nationwide which include public officials, health professionals, educators, businesses, social service agencies, and FBOs.

For all communications, CKF emphasized that printed materials should be clear and generate attention, written at a seventh grade reading level, and without government or technical jargon. Focus groups were particularly valuable in identifying effective communication channels because they allowed input from different populations.

Community Outreach

Families USA is a nonprofit, nonpartisan organization dedicated to the achievement of high quality, affordable health care for all Americans. Established in 2006, the Campaign for Children's Health Care (CCHC) was a lobbying effort to highlight concerns about the nation's nine million uninsured children before Congress as it considered reauthorization of SCHIP. Targets for communication were individuals and organizations that touched children and health and would support signatures for a petition drive.

In general, email and Web site messages provided the most effective outreach strategies to individual and organizational advocates. CCHC's use of an online Story Bank—which included stories about children who are either uninsured or underinsured—resulted in many requests for assistance from target groups. The online program collected and shared stakeholder-related information from which campaign partners, events, call-in days, or an expanded email list were developed. A satellite town hall meeting captured input from 36 hospitals and was followed

by local town hall gatherings. For CCHC, most connections with interested organizations came through the Web site.

CHAPTER 22

PERFORMANCE MEASUREMENT AND CONTINUOUS IMPROVEMENT

Providing assistance to low-income households, elderly and disabled persons, and culturally isolated populations is inherently difficult. Even dedicated social service organizations that have provision of such assistance as a core mission often have difficulty reaching these target populations. For this reason, it is best to adopt a comprehensive and multifaceted approach to the design of customer payment assistance programs. The business process model of customer payment assistance used as a framework for this report (Figure 22.1) illustrates a broad collection of strategies and practices that should be considered in order to take advantage of every opportunity to boost the rate of favorable outcomes. Some strategies and practices may appear more cost-effective in producing favorable outcomes, but special attention should be paid to how one practice adds leverage to another, thus complicating cost-effectiveness analysis. In the end, the mix of strategies and practices being deployed by a utility should be the best combination that is most suited to the unique characteristics of the customer base.

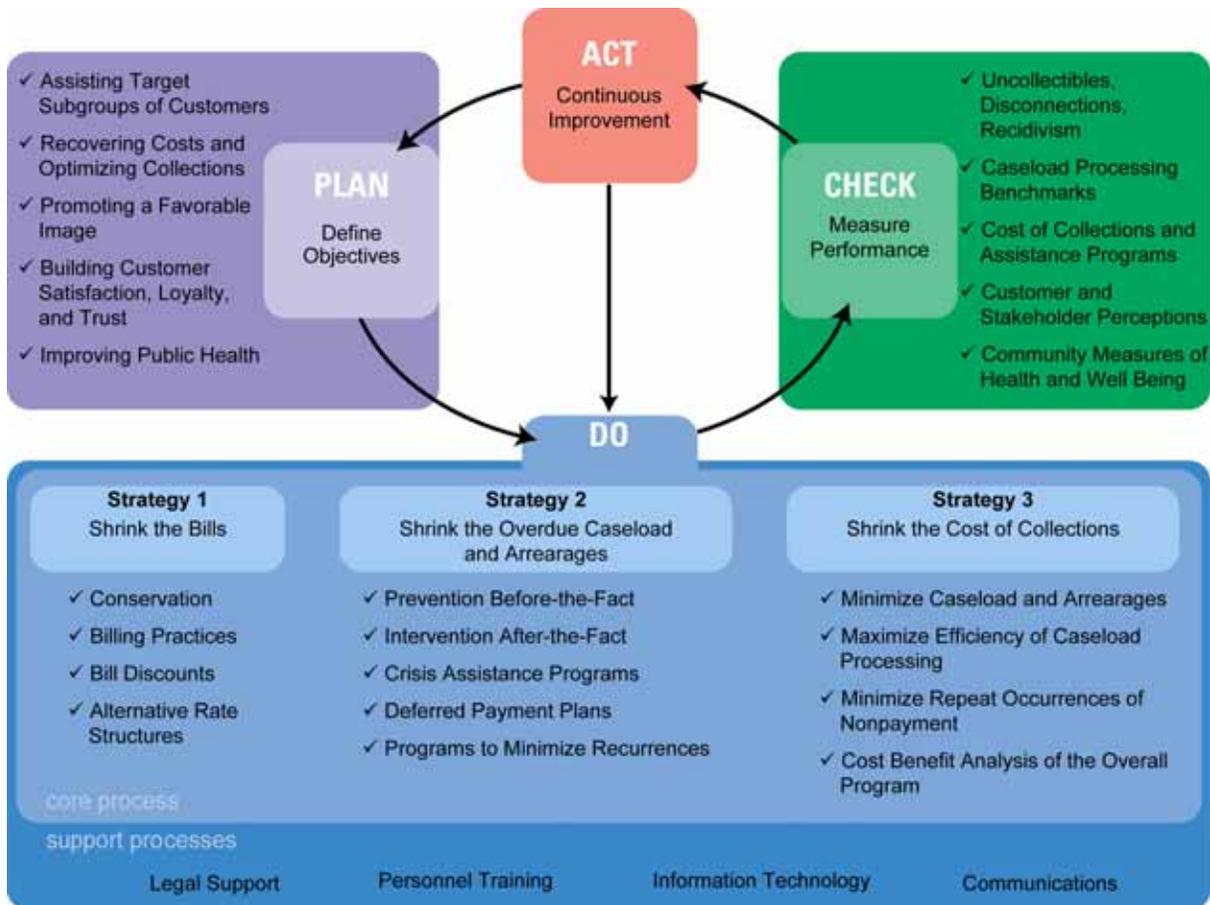


Figure 22.1 Business process model of customer payment assistance program

CONTINUOUS IMPROVEMENT

Following this business process approach, a best practice utility is one that is constantly striving to improve the provision of assistance to payment-troubled customers at each individual step in this process as well as in the aggregate. Such a utility is one that is continually asking and answering the following questions:

- Do we fully understand the nature and significance of nonpayment of utility bills in the community? Is this embedded as part of the shared values of staff, management and governing board members? (Chapter 5)
- Have we identified a meaningful set of subgroups within the customer base that require targeted assistance to alleviate nonpayment problems? Have we established objectives for treating nonpayment issues within these subgroups? (Chapter 6)
- Have we assembled an effective combination of strategies and practices to “shrink the bills” for the target subgroups? Are we implementing these strategies and practices as well as possible? (Chapters 7–10)
- Have we assembled the best possible combination of strategies and practices to “shrink the overdue caseload and arrearages” for the target subgroups? Are we implementing these strategies and practices as well as possible? (Chapters 11–15)
- Are we tracking the cost and effectiveness of our overall program in order to determine the best way to “shrink the cost of collections” while also achieving our broader, longer-term objectives in the community? (Chapter 16)
- Have we assembled an effective combination of strategies and practices in our support processes to provide legal support, personnel training, and IT and communications support to the overall customer payment assistance process? (Chapters 17–21)
- Have we developed and implemented a comprehensive set of activity and outcome measures to evaluate the application and effectiveness of individual strategies and practices? Is measurement and evaluation tied in to re-evaluation of objectives and performance goals to push continual improvement of the customer payment assistance process? (Chapter 22)

An effective means by which to track progress in continuous improvement is the development of a process maturity analysis. Although this practice has been developed to a high art in the management literature (Hammer 2007), it is possible to employ the concept rather simply, as illustrated in [Table 22.1](#). The exercise involves engaging the staff team responsible for the overall process (from one end to the other) to score each of the individual components of the process twice—once to reflect the current status, and a second time to reflect the desired status to be attained within the planning period. Results are averaged together and summarized in the form of a bar chart as illustrated in [Figure 22.2](#). Even in this simple application of process maturity analysis, the resulting bar chart provides a valuable means of drawing a focus on critical areas for continuous improvement.

Table 22.1
Process maturity scoring matrix

Chapter	Program element	As is					Should be				
		1	2	3	4	5	1	2	3	4	5
5	Leadership and shared sense of significance			X							X
6	Understanding and targeting of sub groups			X							X
7	Conservation assistance		X						X		
8	Billing practices			X					X		
9	Bill discounts		X					X			
10	Alternative rate structures	X					X				
11	Prevention before-the-fact			X							X
12	Effective intervention after-the-fact			X							X
13	Crisis assistance		X								X
14	Deferred payment plans			X							X
15	Programs to minimize recurrences		X						X		
16	Managing the cost of collections		X						X		
17	Legal support		X						X		
18	Personnel training			X							X
19	Information technology support		X								X
20 and 21	Communications support		X						X		
22	Performance measurement and continuous improvement			X							X

PERFORMANCE MEASUREMENT

The development of performance measures is an important and distinct aspect of the continuous improvement process. Within each component of a multi-faceted process such as customer payment assistance, there are certain obvious activities and outcomes that can be readily counted. To paraphrase Albert Einstein, however, not everything that is countable really counts. Development of performance measures requires refinement over the course of time and is often enhanced by viewing a number of indicators in combination to obtain the best overall picture of process performance. At the outset, however, it is nonetheless appropriate to start by identifying the most obvious places where program activities and outcomes can be easily counted to get a beginning sense that the process is indeed working and is indeed producing outcomes. Relative changes in the levels of these activities and outcomes from one period to the next at least provide a starting indication of whether changes prompted by the desire for improvement are progressing in the right direction.

ASSISTANCE PROGRAM ELEMENT	PERFORMANCE LEVEL				
	1	2	3	4	5
Leadership and Shared Sense of Significance					
Understanding and Targeting of Sub Groups					
Conservation Assistance					
Billing Practices					
Bill Discounts					
Alternative Rate Structures					
Prevention Before-the-Fact					
Effective Intervention After-the-Fact					
Crisis Assistance					
Deferred Payment Plans					
Programs to Minimize Recurrences					
Managing the Cost of Collections					
Legal Support					
Personnel Training					
Information Technology Support					
Communications Support					
Performance Measurement & Continual Improvement					

AS IS

SHOULD BE

Figure 22.2 Continuous improvement goals

One refinement is absolutely necessary, however. An over-arching principle of the approach to implementing this process model advocated in Chapter 6 and throughout this report is the call for customized combinations of strategies and practices to address the needs of explicitly targeted subgroups of payment-troubled customers. While the aggregate performance of a program across all customers provides a high level picture that has some usefulness, disaggregation of the same indicators in terms of the targeted subgroups of payment-troubled customers provides an understanding of how well the individualized strategies are working. Keeping the need for disaggregation in mind, the following obvious measures of program activities and outcomes could be associated with individual elements of the business process model of [Figure 22.1](#).

- Conservation assistance
 - Number of accounts in target subgroups with high usage
 - Number of conservation mailings to targeted accounts
 - Number of audits with retrofit for targeted accounts
- Billing practices
 - Number of billing errors in targeted subgroups of accounts
 - Number of accounts offering customized billing vs. number in target subgroups
- Billing discounts
 - Number of accounts with nonpayment issues in targeted subgroups
 - Number of accounts eligible for discounts vs. number in target subgroups
- Alternative rate structures

- Number of accounts with nonpayment issues in targeted subgroups
- Fixed charge proportion of total bills in targeted accounts
- Prevention before-the-fact
 - Number of accounts in each target subgroup eligible for other assistance
 - Number of targeted mailings about other assistance programs
 - Number of direct referrals to other assistance programs
- Effective intervention after-the-fact
 - Number of inbound calls from accounts in target subgroups
 - Number of outbound phone calls to accounts in target subgroups
 - Number of first call resolutions
 - Number of successful “self-cure” resolutions
 - Number of new payment troubled accounts in target subgroups advancing to disconnection
- Crisis assistance
 - Number of crisis cases logged
 - Number provided/referred to crisis assistance
 - Number of crisis cases advancing to disconnection—by target subgroup
- Deferred payment plans
 - Total arrearage of accounts in target subgroups
 - Percent of total arrearage in target subgroups covered by deferred payment plans
 - Number of accounts in arrearage in target subgroups
 - Percent of total accounts in target subgroups on deferred payment plans
 - Total new arrearage in target subgroups
 - Number of new accounts in arrearage in target subgroups
 - Number of successfully completed payment plans for accounts in target subgroups
 - Number of unsuccessful payment plans for accounts in target subgroups
 - Number of failed payment plans advancing to disconnection—by target subgroup
- Programs to minimize recurrences
 - Number of new incidences of nonpayment in accounts with history of nonpayment issues
 - Number of recurrences within each targeted subgroup
- Managing the cost of collections
 - Cross functional tracking and roll-up of program costs
- Legal support
 - Number of formal or informal complaints about assistance and/or disconnection efforts
- Personnel training
 - Number of formal or informal complaints about assistance and/or disconnection efforts
 - Number of first call resolutions
 - Number of successful “self-cure” resolutions
 - Number of new payment troubled accounts in target subgroups advancing to disconnection

- Number of successfully completed payment plans for accounts in target subgroups
- Number of unsuccessful payment plans for accounts in target subgroups
- Number of failed payment plans advancing to disconnection—by target subgroup
- IT support
 - Number of accounts matched to databases of other assistance programs—by target subgroup
 - Number of first call resolutions
 - Number of successfully completed payment plans for accounts in target subgroups
- Communications support
 - Number of conservation mailings to targeted accounts
 - Number of audits with retrofit for targeted accounts
 - Number of targeted mailings about other assistance programs
- Continuous improvement
 - Customer surveys and focus groups
 - Year-over-year changes in all the above indicators

It is worth noting that the potential performance indicators listed above are most useful to a utility in comparing its own performance to that of prior years. This area of practice does not lend itself to inter-utility comparisons of benchmarks due to the inherent differences in a wide array of variables relating to local economic circumstances, income levels, the cost of living, and the cost of water service.

ADVANCED PRACTICES

Too often, a utility and its governing board will respond to the negative impression of disconnection policies with some version of a customer payment assistance program, but seldom is it the comprehensive and continually improving approach advocated in this report. Without both of these elements—comprehensiveness and continual improvement—programs can simply lead to complacency. Once it is possible to say that a utility has a program to try to help payment-troubled customers, that is often enough until the next time the issue flares up. Unfortunately, this limited approach serves the best interests of no one. Advanced practitioners assert that a comprehensive best practice approach is, in fact, supported by a net positive business case (Colton 1991, Victoria 2005) that is further enhanced by the additional spillover benefits that accrue to the utility in improving its image in the community and among customers. Moreover, such deliberate intention to assist payment-troubled customers can actually reduce the scope of the utility bill payment problem and make an important difference in many lives.

Within the energy utility sector, there is a developed literature around the issue of “universal service.” The ideal that all households should have uninterrupted essential utility services has also been articulated in the water sector. Achieving the standard of universal service may seem impractical and unrealistic in face of the hard realities facing some households and the hard realities facing utility finance managers as well. There is a tendency to accept a nominal level of performance such as 5% of customers on payment plans and 1% disconnections (Victoria 2005) as an acceptable set of outcomes in an imperfect world. Water utility survey

results reported in Chapter 4 similarly confirm that uncollectibles in a range of 1–3% is not considered to represent an urgent problem.

In contrast to this perspective, another view of the goal of universal service maintains that while it may be presently impossible for us to see a way of pushing the number of disconnections down to zero, that does not mean we should not be continually striving to reduce the number. In effect, therefore, continual improvement of customer payment assistance programs can be used as a measure of a utility's efforts to attain the goal of universal service (Colton 1998). Universal service may not mean zero disconnections, but it should mean making an effort to approach zero as far as practical. An advanced approach to documenting this level of continual improvement was outlined in testimony before the Pennsylvania PUC (Colton 1998) as follows. A universal service performance review indicator for these purposes should involve the following components:

Termination of Service

The performance of the utility is to be measured by the “termination rate.” Termination rate is calculated by dividing the number of residential service terminations by the number of residential customers. Termination rate enables a comparison of termination practices among utilities without regard to differences in utility size. As a result, the figure represents an absolute comparison of performance.

The first component compares the performance of a specific utility to the termination rate for that utility in a base period. If the utility is at the base period level, it will receive a score of 5. For every 10% divergence from the base period, it will receive a plus or minus rating of 1 respectively up to a score of +/-10.

Payment Agreements

A successful completion of a deferred payment agreement involves a customer that retires his or her arrears without need for renegotiation of the agreement and without need for the disconnection of service. Given the general mandate that utilities enter into only “reasonable” deferred payment agreements, virtually all deferred payment agreements presumably should be successfully completed.

The second component compares the performance of the utility in a specified time period to the deferred payment plan success rate in a base period. If the utility is at the base period level, it will receive a score of 5. For every 4% divergence up or down from the base period, it will receive a plus or minus rating of 1 respectively up to a score of +/-10.

Money at Risk

The money at risk to a utility provides insight into the total financial exposure that the utility experiences due to nonpayment of current bills. Collectability rates of 95% and more should be expected for current bills, while collectability rates for arrears of older than 60 days drop sharply. The rate at which money is placed at risk is calculated by summing the total dollars in arrears along with the total dollars subject to deferred payment arrangements. The summed dollar figure for the study year is then indexed to a base period. If the base period sum is \$100, for example, and the study period amount is \$150, the index is 1.5.

The third component compares the annual performance of a specific utility to the “money at risk” for a base period. If the utility is at the base period level, it will receive a score of 5. For every 0.2 divergence up or down from the base period index, it will receive a plus or minus rating of 1 respectively up to a score of +/-10.

Customers in Arrears

Households that are in arrears, but that have not entered into a deferred payment agreement, represent a serious risk of loss to a utility. Moreover, by entering into a deferred payment plan, the risk that the customer will ultimately lose its utility service is lessened. One aspect of universal service involves both getting—and keeping—late paying customers on deferred payment arrangements.

The rate at which customer service is placed at risk due to nonpayment is calculated by summing the total customers who are in arrears but who have not entered into a deferred payment plan with the utility. The fourth component compares the annual performance of a specific utility to the “customers in arrears” rate for a base period. If the utility is at the base period level, it will receive a score of 5. For every 2% divergence up or down from the base period, it will receive a plus or minus rating of 1 respectively up to a score of +/-10.

Weighted Arrears

In addition to the number of accounts in arrears, the amount of money in arrears is an indicator of the extent to which customers have their service in jeopardy because of nonpayment. Comparisons of arrears between utilities (as well as between time periods), however, can be misleading because of differences in bill sizes. For this reason, a weighted statistic is calculated so that the effect of different average bills is taken into consideration. More specifically, the score used in this performance indicator is a weighted arrears for all customers who are not in deferred payment agreements. It is calculated by dividing the total monthly arrears not subject to deferred payment agreements by the average monthly customer bill. Weighted arrears that exceed the base period level point to a practice of allowing household arrears to persist without placing such households on to deferred payment agreements.

This component thus compares the performance of a utility to the “weighted arrears” rate for a base period. If the utility is at the base period level, it will receive a score of 5. For every two-tenths (0.20) “bill behind” divergence up or down from the base period, it will receive a plus or minus rating of 1 respectively up to a score of +/-10.

Need for Each Component

All five components are necessary to reach the desired results of universal service performance measurement without creating perverse incentives to pursue counter-productive collection strategies. Consider:

- To create rewards for reducing arrears without creating penalties for increasing shutoffs would lead a utility to refuse to negotiate reasonable payment plans with those least able to pay. The utility would then follow with the termination of service. The end sought, however, is not simply the reduction of arrears, but rather the pursuit of universal service.

- Similarly, to create an incentive for increasing the number of payment plans without penalizing high proportions of unaffordable plans would lead a utility to place customers on deferred payment arrangements without regard to the chance of those plans to succeed. There is not only a need to get payment-troubled customers on deferred payment arrangements, but to get them on affordable plans with a reasonable opportunity for success.
- To create an incentive for maximizing the percent of customers on deferred payment arrangements, without creating an incentive to minimize total customers in debt at the same time, may well divert resources from the overall goal of full and timely payment. The first step, of course, is to minimize overall levels of debt. To the extent there is debt, that debt should be made subject to a deferred payment arrangement.

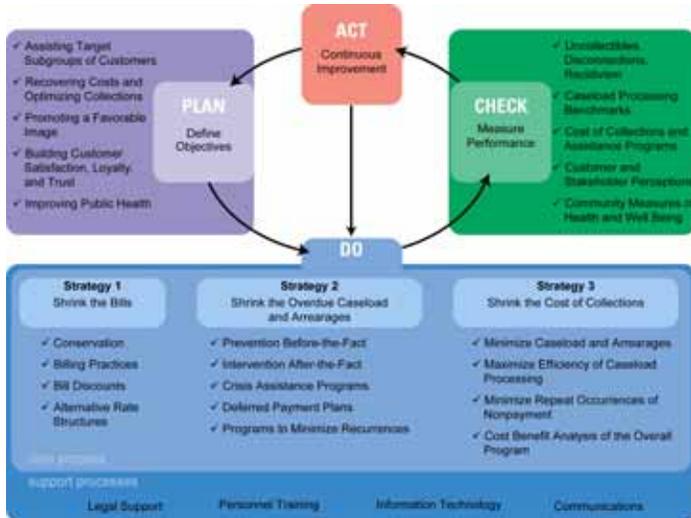
Calculation of Final Score

The composite universal service measurement of a utility is calculated by adding the various component scores.

Line	Measure	Score
1	Termination Rate	
2	Money at Risk Index	
3	Deferred Payment Plan Success Rate	
4	Weighted Arrears	
5	Percent Customers in Debt	
6	Total Score	Sum lines 1–5

CHAPTER 23

CUSTOMER PAYMENT ASSISTANCE IN SMALL SYSTEMS



All of the strategies and practices identified in the business process model of customer payment assistance programs can be applied in small utility systems—with appropriate scaling to meet the inherently different circumstances. In fact, some practices may actually be much easier to apply in the context of a small community.

Much depends upon the both the size and demographics of a community. A small community has a smaller base across which to spread the costs of assisting others. Outside assistance from private or governmental sources can help

to ease this burden. In cases where small community utility systems exist within pockets of extreme poverty, the case for outside assistance may be compelling.

In the course of this research project, the strategies and practices comprising the business process approach to customer assistance were presented to a seminar audience consisting of field representatives of the Rural Community Assistance Partnership from programs located in impoverished areas of Ohio, Kentucky, Wisconsin, Indiana, South Carolina, Michigan, New Mexico, and New Jersey. Compared to the 1-to-3% level of uncollectible utility bills reported as typical in the survey of water utilities summarized in Chapter 3, members of this group believed that the communities they serve sometimes face uncollectibles problems that are ten times as great, constituting a true threat to financial sustainability.

Where demographic factors allow, many small systems can succeed in applying the strategies and practices of the business process approach as appropriate to their circumstances. This chapter reviews the major components of the model from the perspective of application to small systems.

OBJECTIVES

While most of the organizational objectives of a customer assistance program are similar at small scale, a small utility is likely to have a more personal relationship with its customers. A small water system is a clear benefit to a community. Many rural residents in impoverished areas can still remember when there was no central water and sanitation service. As many as half a million people in impoverished rural areas still lack such basic services today (RCAP 2004).

One of the biggest differences in a small community is related to the old saying that everyone knows everyone’s business. Inability to pay utility bills can be an embarrassment to the customer and present the water system administrator who has to inquire about the missing payment with a sensitive task. By contrast, when a customer in a large city is confronted by a large and impersonal utility bill collection department, there is less at stake for the reputations of

both the customer and the utility. In the anonymity of the big city environment, people do not feel as if their every move is being carefully watched and judged.

Another concern involves program implementation consistency. If word spreads that someone got a special break on paying their utility bill, others will want similar treatment or they will see things as unfair. But even when the small utility is as even-handed and fair as it can be in trying to resolve nonpayment issues, a single disconnection can provoke a backlash and spread an impression that the utility is unfair and uncaring to disadvantaged families.

Nothing can be done to alter the realities of small town life. On the plus side, there may be much greater opportunity to target or customize some types of assistance efforts because the smaller number of customers makes it more tractable to do so. Some highly effective practices that might only reach a fraction of the target subgroup of customers in a large city might reach a much larger proportion of a small community, partially because it is easier to identify program target recipients and conduct the needed outreach. In the end, the small utility wants to achieve the same objectives in customer assistance programs—to help people, to keep the utility sustainable, to give the utility a positive image, and to help the community.

STRATEGY 1—SHRINK THE BILLS

Conservation retrofits to reduce water consumption (Chapter 7) is a prime example of a practice that is very appropriate for a small utility system. If there are meters to indicate which customers have higher than average consumption, it is easy to target such customers for outreach. Unlike the big city, outreach does not have to be limited to an impersonal bill-stuffer promoting conservation. In a small town, it is possible to contact customers directly and talk to them about it personally. If installing conservation fixtures is impeded by constraints of household finances, subsidized assistance by the utility can be a good bargain since conservation retrofit has only a small fixed cost and produces a lasting impact on reducing bills and improving collections.

Customization of billing practices (Chapter 8) represents another tool that may be particularly appropriate under small system conditions. Some rural residents may be more likely to have seasonal variations in their water use and/or employment and income patterns. These factors can be accommodated with customized forms of budget billing intended to better align cost recovery with available household income. This may be a disadvantage to a small system that uses billing software with limited flexibility. However, manual handling of a targeted subgroup of accounts might not be too great a burden, especially if it offsets later collections activities.

As discussed in Chapter 9, bill discounts may not be legally feasible in all institutional settings. But where allowed, a small system may benefit from this approach and even find it easier to administer if the number of accounts involved is relatively small and eligibility is established through an established social services program.

Alternative rate structures discussed in Chapter 10 may require some upfront analysis to develop the best approach, but lowering the cost of water for essential uses can be beneficial and light on administrative burdens once established.

STRATEGY 2—SHRINK THE OVERDUE CASELOAD AND ARREARAGES

As discussed in Chapter 11, an effective way to prevent problems of nonpayment of utility bills is to help make customers aware of other social service programs that can decrease their living expenses. This strategy can be even more effective in a small community where there is a manageable number of accounts and where personal appeals can be undertaken, in addition to mass communications.

Chapter 12 describes a number of approaches for effective intervention once a bill has gone past due. Many of these approaches can be adapted by small systems, but if the number of delinquent accounts is manageable, there is a better opportunity in a small system to rely more heavily on the personal touch, increasing the odds that assistance programs will actually reach those in need.

Crisis assistance programs discussed in Chapter 13 are a valuable component of an overall approach to assisting payment troubled utility customers. Crisis situations such as job loss or a major illness are often the reasons why low-income households get behind on utility bills. While resources for a crisis assistance fund may be relatively limited in a small community, other assistance programs may be available drawing on State or Federal sources.

Ultimately nonpayment is resolved through either deferred payment plans or disconnections. Chapter 14 provides a thorough review of the steps involved in developing and managing deferred payment plans. This process entails one-on-one interaction with the customer, so there is no advantage to large scale. The same methods can be applied one customer at a time, regardless of system size.

Chapter 15 provides additional steps that all utilities should remember to include in an assistance program in order to help customers minimize the recurrence of nonpayment problems in the future.

STRATEGY 3—SHRINK THE COST OF COLLECTIONS

Chapter 16 reviews a number of considerations that enter into a utility's need to continually evaluate its assistance programs from the perspective of optimizing the expenditure of resources in pursuit of delinquent accounts. These issues are identical for small systems and, in fact, costs might be easier to isolate and track in a small scale operation. However, as also discussed in Chapter 16, cost-effectiveness in collections should not be the only objective under consideration. The broader benefits of a customer assistance program to a utility and a community must also be weighed when determining an acceptable level of costs to be borne in customer assistance.

SUPPORT SERVICES

Small system efforts in customer assistance are subject to the legal considerations and constraints described in Chapter 17. Most importantly, it is necessary to involve legal counsel in designing a program containing any new or different elements since local legal restrictions may vary.

Chapter 18 describes training needs for customer service representatives assigned to customer assistance programs. In very small systems, these functions may fall on a very few people. It is essential that these individuals have the necessary sensitivities discussed in Chapter 18 in order to make efforts in customer assistance as effective as possible. While the

collections function can be more personal in a small system, it is best to view this as a positive opportunity to develop relationships that will help customers find more lasting solutions to underlying causes of payment problems.

Chapter 19 describes database and analytical support requirements to help implement and administer customer assistance programs in large utilities. Many of these needs may be addressed through much simpler means in small systems.

Chapters 20 and 21 describe approaches to communications efforts intended to help spread the word about assistance programs to target subgroups of customers. Many of these ideas may not apply in the setting of a small system.

PERFORMANCE MEASUREMENT AND CONTINUOUS IMPROVEMENT

As described in Chapter 22, the objective of performance measurement should not be to compare one utility against another, but rather to track the year-over-year progress of an individual utility's customer assistance programs. This enables managers to assess what is working and what is not working, leading to continual improvement of program outcomes over the course of time. The performance measures suggested in Chapter 22 are tractable for any size utility and, in fact, some may be easier to record and track at small scale. It is important to follow through. When a program is implemented without deliberate performance measurement, it suggests a lack of appropriate management attention to the issue of nonpayment. Even if the measures are simple and the results seem apparent in a small system, it is good practice to formally measure and report results.

CHAPTER 24

CONCLUSIONS AND RECOMMENDATION

CONCLUSIONS

A central finding of this research is that while most water utilities can say that they take steps to help payment-troubled customers, their “programs” of activity are usually little more than ad hoc collections of practices, not well integrated with other utility management practices and operated without a strong sense of objectives or mission. Customer payment assistance programs have sometimes arisen out of the politics of the moment, following bad economic times when disconnections have risen to levels drawing negative attention. Yet, this can lead to a sense of complacency that “something” is being done about the problem, suppressing the initiative to try to do better. This was confirmed in a survey conducted by the AWWA in 2004. Two-thirds of respondents reported their level of uncollectibles was below 1% and was not considered to be a big problem. Economic conditions have changed drastically since the AWWA survey was conducted in 2004. Comprehensive utility programs that reflect the deliberate intention and follow-through of a business process are likely to function better than ad hoc programs in both good and bad economic conditions. It is not enough to say, “we have a customer assistance program.” Water utilities should aspire to be able to say, “we have a customer assistance program that reflects the standard of best practice in the industry and we are continually improving it.”

One of the beneficial outcomes of applying a Quality Management framework to a business process is the almost immediate identification of “low-hanging fruit.” There are always a number of gaps that are revealed by the initial application of a comprehensive and systematic framework which can lead to early successes and quick program improvements. There are also longer-term benefits from the simple disciplines of defining the objectives of a business process and undertaking deliberate efforts to measure the performance of the process in meeting the objectives.

Consideration of the objectives of customer payment assistance programs yields a number of significant observations for water utilities. Whereas a 1% level of uncollectibles implies a small problem, statistics show that nationally about 15% of residential water customers are low-income households that are constantly at risk of payment problems. This proportion can obviously be much larger in some jurisdictions—and, costs have been continually rising faster than inflation. So, although only 1% may be in arrears at any given time, a much larger proportion of the customer base may come into contact with a utility’s collections process over the course of time. Word of mouth will also expand awareness of the utility’s reputation in this area of performance. While it may not seem like it, this area of business practice may have a great bearing on a utility’s ability to build and sustain customer loyalty, satisfaction, and trust over the long haul. Business research has shown that customers have long memories about their positive and negative experiences with customer service.

An important insight stemming from consideration of program objectives pertains to whether the utility should be striving to simply “resolve” instances of nonpayment, or trying to “help solve” the endemic problem of nonpayment by incorporation of strategies and practices that address, or are sensitive to, underlying causes of nonpayment. While utilities are not in the social services business, a proactive approach is ultimately more effective than waiting for

accounts to appear as past due. The most obvious strategy is to choose from an array of options for integrating the utility's activities more closely with those of the actual social service providers in the community. One of the greatest challenges in providing social services is identifying and reaching families in need. Utilities can help make these connections to the benefit of the entire community.

Other solution-oriented strategies available to utilities involve provision of direct assistance to customers in various forms (crisis assistance, bill discounts, debt forgiveness, etc.) constituting a cross-subsidy—where one group of customers bears costs on behalf of another. Such deliberate cross-subsidies are illegal in many jurisdictions and forbidden by utility policies in others. However, in the standard commercial approach to collections, much collections effort is wasted and costs of excessive disconnections, reconnections, and write-offs are incurred with no means of recovery except through the very same mechanism of cross-subsidy by full-paying customers.

Another critical factor in the success of a customer assistance program is recognition of the fact that there are various different causes of nonpayment at the household level, including job loss, illness, disability, domestic turmoil, and unexpected expenses that upset fragile budgets in low-income households. Given that the causes are different, it follows that a utility collections program that treats all cases following the same protocol is going to be less effective than a program which recognizes that one size will not fit all circumstances. The best practice is to develop custom approaches for specific target subgroups of customers with recurring patterns of payment problems. Commercial approaches to collections make no distinction between delinquent accounts, driving all those that either “can't pay” or “won't pay” toward termination. If a collections strategy instead recognizes that many simply “can't pay when due,” there are numerous options for recovering substantial revenue with fewer terminations.

A final consideration of importance to water utilities is the relationship of payment problems to health issues. Poverty researchers have documented that utility bills compete with other necessities such as food and medical care in the household budgets of low-income families. Potential impacts relate to many of the same public health endpoints targeted by SDWA standards such as effects on children and the unborn. Utilities must acknowledge this connection between affordability and public health as another compelling reason to go beyond normal commercial collections practices and help meet higher community goals in this area of service.

RECOMMENDATIONS FOR UTILITIES

A best practice utility is one that adopts a comprehensive and systematic view of its customer assistance program, treating it as a mainline business process that has clearly articulated strategic and operational objectives and that is submitted to regular evaluation and refinement based on well-defined measures of process performance.

A best practice utility should be proactive rather than reactive in assisting payment-troubled customers. A proactive utility will:

- Examine patterns of nonpayment to define key subgroups of payment-troubled customers and design custom approaches to meet their differing needs.
- Integrate its assistance efforts with those of private and governmental social service and assistance providers in the community—such as sharing of database resources to

identify potential clients and improve outreach for assistance programs at a community-wide level.

- Implement communications campaigns to expand awareness of utility and other assistance programs, conveying effective knowledge to target subgroups of customers, enabling and encouraging them to seek assistance.
- Develop custom approaches to treating different types of nonpayment situations for various subgroups and train customer service staff to a high level of readiness to connect clients with the appropriate assistance on the first call, or at the first point of contact.
- Provide various forms of after-care to assist customers in the aftermath of resolving an incidence of payment troubles in order to help minimize recurrences.

A best practice utility is one that recognizes that going beyond the normal realm of standard commercial collections practices is pragmatic and worthwhile when weighed in terms of the overall mission of the utility within the community. Some utilities have even reported a net positive business case can be made for making this effort. It is certain that the total benefits outweigh costs when viewed from the most holistic perspective.

RESEARCH RECOMMENDATIONS

The utility survey conducted in 2004 by AWWA to characterize customer assistance programs and the extent of uncollectibles is clearly out of date in the wake of recent economic disturbances. It would be a straightforward matter to replicate the survey at this time in order to measure the changes that have resulted and recalibrate an understanding of the baseline conditions.

The best practice business process model outlined in this report is anchored in quality management principles that require routine measurement of performance and evaluation of program effectiveness in order to foster continual improvement. A number of potential approaches to performance measurement are suggested in Chapter 22. An established method for enhancing the development of a business process and of performance measurement is to convene a research consortium of practitioners who share the desire to improve the same process. By working together, the participants can learn and advance more rapidly through their combined experiences. Such a consortium could be convened as a follow-up research project. In the consortium benchmarking study design, participating utilities would meet initially to refine the process model proposed here and to nominate a comprehensive set of performance measures. They would then implement their chosen combinations of strategies and practices while measuring performance for a specified period (say, a year), after which, they would meet again to compare notes and propose both process and measurement improvements. Unlike, competitive benchmarking, the measures proposed in Chapter 22 are most useful in measuring the effectiveness of an individual utility's program and are not intended for inter-utility comparisons, but participants in a consortium effort still benefit from more rapid learning through comparison of experiences and, as a research effort to be documented, a consortium study would help to advance the entire industry along this path. In conceiving such a study, it is also recommended that the water sector combine forces (and funding sources) with the energy sector to expand the scope to encompass both water and energy utilities. While some energy utilities have more advanced practices as a result of their higher bills, the energy literature is still lacking a comprehensive business process approach and work on performance measurement has only

begun in the energy sector. A major push on measurement and continuous improvement would be the best way to advance the entire field of utility customer assistance quickly and efficiently to a higher plateau.

Water utilities are not in the business of providing social services. This is a standard refrain that is often invoked as a reason to hold back from devising programs to help payment-troubled customers. While it is true that provision of social services is not the core mission of water utilities, the process model proposed here asserts that some part of a utility's mission—and arguably, an important part—does have some of the character of social services and can benefit from a closer appreciation of best practices in social services. The good news is that provision of social services to low-income and other disadvantaged subpopulations has been the object of extensive research and much has been discovered that is quite useful. The bad news is that this learning is buried away in literature that lies far outside the domain of utility practitioners. This deficiency could be easily corrected by a research study designed to develop an authoritative primer on the intersection of poverty and essential utility services—perhaps along the lines of the recent primer on climate change produced by the Water Research Foundation (Miller and Yates 2006). The primer would be useful as a fact base for utilities and public policymakers to dispel myths that become part of organizational belief systems in the absence of facts. It would also serve as a tool to help utilities customize their assistance programs and provide training to front-line staff administering customer assistance.

Provision of various forms of customer assistance is illegal in many locations due to a steadfast restriction against any form of cross-subsidy—the instance where one customer bears costs incurred on behalf of another customer. Ultimately, providing assistance may entail some cross-subsidy and the restrictions must be loosened to admit many of the practices described here. The origins of such restrictions in ratemaking policy are quite understandable and yet, they are, in practice, quite imperfect. A relentlessly commercial one-size-fits-all approach to collections and terminations can result in higher administrative costs than a more accommodating approach to collections. Since the cost of collections is necessarily borne by paying customers, it is a cross-subsidy—and, a larger one than necessary. Other forms of cross-subsidy also exist. Careful analysis should be applied to such issues as whether the full cost of extending new service is being recovered in connections fees or whether fund transfers to local government entities are legitimate. In the current environment, very visible and deliberate cross-subsidies such as those involved in customer assistance are vulnerable whereas less visible cross-subsidies buried away in the nuances of ratemaking and accounting can escape notice. The entire subject of “full cost pricing” is ripe for rigorous research attention. As it currently stands, the phrase has a significant presence in water policy literature and debates, but there is no agreed method of defining or documenting it.

Databases can be a valuable resource in targeting and customizing a customer assistance program, but the data has to first be made available for use. Two obvious sources of valuable information are within easy reach of most utilities, but might benefit from research efforts to stimulate their full exploitation.

First, the Federal LIHEAP has been in existence for 30 years and has a highly developed information infrastructure involving energy utilities and State and local social service agencies. Tapping into this existing network is one of the surest ways for a water utility to quickly obtain data with which to customize a customer assistance program. Accessing client data raises concerns for privacy, but the intention of benefiting the clients is usually regarded as a sufficient reason to proceed, albeit with due care. More generally, close integration of water utility

programs with the existing LIHEAP programs is an excellent means of improving overall outcomes for the community. There have been repeated calls for a water version of the LIHEAP legislation to create a parallel program for water utilities. Were such an effort to go forward, it is the resulting integration with the existing LIHEAP network that would constitute the largest benefit. Research might be applied to review the options for a water LIHEAP program and make a specific recommendation for adoption.

The second, and by far the greatest, information resource available to utilities is their own customer information systems (CIS). However, the barriers to bringing such systems to bear on customization of assistance programs can be substantial. CIS are designed primarily to perform billing functions and adapting them to other purposes or integrating them with other data systems can be viewed as a threat by system owners who have a specific responsibility to produce correct billings on a schedule and correctly track collections activities. These are legitimate concerns, but they are also surmountable with the right type of effort. Research could usefully be applied to this question of adapting CIS to permit integration with other data systems and mining of utility customer data to produce alternative types of outputs. An even broader study might be envisioned since this issue has been raised in other areas—such as water demand analysis and asset management.

The present research project has focused exclusively on providing assistance to single-family residential customers. Nationally, this covers only about half of the low-income population. The other half live in rental apartments. For the most part, rental units do not have individual water meters so the customer relationship is between the utility and the landlord. This is a totally different dynamic and requires a totally different set of strategies and practices from those described here. Moreover, water utilities are alone in this area since energy use is metered in most individual apartments. Policies for coping with payment-troubled landlords are a significant challenge that call for the utility to closely integrate its activities with local housing officials and regulators. Disconnection may or may not be an available remedy. Although the available strategies and practices applicable to this problem are ultimately very local, it is still likely that utilities could learn substantially from their mutual experiences. A consortium research study on this topic could be very fruitful in this regard. Rather than limiting participants to utility personnel, it could also seek to enlist participants from city housing and regulatory agencies as well as drawing upon appropriate State and Federal research and funding sources to supplement the effort.

REFERENCES

- Accent. 2007. Debt and Disconnection Review: Consumer Research. London, UK: Accent. December.
- Anonymous. 2007. Utility Briefs. *Electrical Apparatus* 60:3–14.
- Ascent Group. 2005. Meter Reading Profiles and Best Practices 2005. Athens, Ga.: The Ascent Group, Inc.
- AWWA (American Water Works Association). 2000. Manual M1: Principles of Water Rates, Fees, and Charges. Denver, Colo.: AWWA.
- AWWA (American Water Works Association). 2005. Thinking Outside the Bill: A Utility Manager's Guide to Assisting Low-Income Water Customers. Denver, Colo.: AWWA.
- AWWA (American Water Works Association). 2006. Manual M52: Water Conservation Programs—A Planning Manual. Denver, Colo.: AWWA.
- Bauman, K. 1998. Direct Measures of Poverty as Indicators of Economic Need: Evidence From the Survey of Income and Program Participation, US Census Bureau Population Division Technical Paper No. 30.
- Bauman, K. 1999. Extended Measures of Well-Being: Meeting Basic Needs. US Census Bureau Current Population Reports No. P70-67.
- Beecher, J.A. 1994. Water Affordability and Alternatives to Service Disconnection. *Journal AWWA* 86:10:61–72.
- Beecher, J.A., J.R. Landers, and P.C. Mann. 1990. Cost Allocation and Rate Design for Water Utilities. AwwaRF Research Report #90590.
- Beecher, J.A., D.M. Pekelney, and T.W. Chesnutt. 2001. Socioeconomic Impacts of Water Conservation. AwwaRF Research Report #90817.
- Bergman, M. and US Census Bureau. 2003. Press Release: Nearly 1-in-5 Speak a Foreign Language at Home; Most Also Speak English 'Very Well.' Census Bureau Reports. Available: <<http://www.census.gov/Press-Release/www/releases/archives/census>>. Cited 9/25/2007.
- Beverly, S.G. 2001. Measures of Material Hardship: Rationale and Recommendations. *Journal of Poverty* 5:1:23–41.
- Butrica, B., D. Murphy, and S. Zedlewski. 2008. How Many Struggle to Get by in Retirement? Urban Institute. Available: <http://www.urban.org/retireent_policy/urf.cfm?ID = 411627>.
- Cavanagh, R. 1983. Electrical Energy Futures. *Environmental Law* 14:133–175.
- Cavanagh, R. 1988. Responsible Power Marketing in an Increasingly Competitive Era. *Yale Journal on Regulation* 5:331–366.
- Chesnutt, T.W., J. Christianson, A. Bamezai, C.N. McSpadden, and W.M. Hanemann. 1995. Revenue Instability and Conservation Rate Structures. AwwaRF Research Report #90681.
- Chesnutt, T.W., J.A. Beecher, P.C. Mann, D.M. Clark, W.M. Hanemann, G.A. Raftelis, C.N. McSpadden, D.M. Pekelney, J. Christianson, and R. Krop. 1997. Designing, Evaluating, and Implementing Conservation Rate Structures. Sacramento, Calif.: California Urban Water Conservation Council.
- Colton, R.D. 1991. A Cost-Based Response to Low-Income Energy Problems. *Public Utilities Fortnightly* March 1, 127(5).

- Colton, R.D. 1992. *Nonparticipation in Public Benefit Programs: Lessons for Energy Assistance*. Boston, Mass: National Consumer Law Center.
- Colton, R.D. 1995. *A Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility and Childhood Education in Missouri*. Belmont, Mass.: Fisher, Sheehan and Colton.
- Colton, R.D. 1998. *Performance Based Evaluation of Maintaining Universal Service in a Competitive Utility Industry*. Pennsylvania Public Utilities Commission Docket No. L0970130, January.
- Colton, R.D. 2000. *Outreach Strategies for Iowa’s LIHEAP Program: Innovation in Improved Targeting*. Report prepared for Iowa Department of Human Rights, Des Moines, Iowa. September.
- Colton, R.D. 2005. Letter to Mr. Ashley Schannauer of the New Mexico Public Regulation Commission dated November 5, 2005.
- Colton, R.D. and D. Smith. 1993. The Duty of a Public Utility to Mitigate “Damages” From Nonpayment Through the Offer of Conservation Programs. *Boston University Public Interest Law Journal* 3:239–278.
- Fox, S. and G. Livingston. 2007. *Latinos Online: Hispanics With Lower Levels of Education and English Proficiency Remain Largely Disconnected From the Internet*. Pew Internet and American Life Project. Available: <http://www.pewinternet.org/pdfs/Latinos_Online_March_14_2007.pdf>. Accessed 9/11/2008.
- Goodman, L.S. 1998. *The Process of Ratemaking*. Vienna, Va.: Public Utility Reports.
- Hamilton, L. 1983. Saving Water: A Causal Model of Household Conservation. *Sociological Perspectives* 26(4):355–374.
- Hammer, M. 2007. The Process Audit. *Harvard Business Review*. April.
- Hasson, D.S. 2002. Water Utility Options for Low-Income Assistance Programs. *Journal of the American Water Works Association* April:94(4).
- Hasson, D. S., P. Brandt, K. Corssmit and E. Rothstein et al. 2007. *Affordability of Wastewater Service*. Alexandria, Va.: Water Environment Federation.
- Iceland, J. and K.J. Bauman. 2007. Income Poverty and Material Hardship: How Strong is the Association? *Journal of Socio-Economics* 36:376–396.
- Institute of Education Sciences, US Department of Education, and National Center for Education Statistics. 2005. *Key Concepts and Features of the 2003 National Assessment of Adult Literacy*. Available: <<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid = 2006471>>. Cited 5/28/2007.
- Jane Mobley Associates and G. Bond (eds.). 2004. *Community Guide for the Kentucky Outreach and Information Network*. Frankfort, Ky.: Commonwealth of Kentucky, Cabinet for Health and Family Services/Department for Public Health.
- Jane Mobley Associates and G. Bond (eds.). 2006. *Community Guide for the Kentucky Outreach and Information Network*. Frankfort, Ky.: Commonwealth of Kentucky, Cabinet for Health and Family Services/Department for Public Health.
- Jane Mobley Associates and C. Simon (eds.). 2006. *Public Health Workbook to Define, Locate, and Reach Special, Vulnerable, and At-Risk Populations in an Emergency* (draft in clearance process). US Centers for Disease Control and Prevention.
- Kenney, G. and J. Haley. 2001. *Why Aren’t More Uninsured Children Enrolled in Medicaid or SCHIP*. New Federalism. National Survey of America’s Families. Washington, D.C.: Urban Institute.

- Kenney, G., J. Haley, and L. Dubay. 2001. How Familiar are Low Income Parents with Medicaid and SCHIP. *New Federalism. National Survey of America's Families*. Washington, D.C.: Urban Institute.
- Kristov, L. 1997. Customer Information: Confidential? *Electric Perspectives* 22(1):30–41.
- Madden, M. 2006. Internet Penetration and Impact April 2006. Pew Internet and American Life Project. Available: <http://www.pewinternet.org/pdfs/PIP_Internet_Impact.pdf>. Accessed 9/11/2008.
- Mayer, P., W. DeOreo, T. Chesnutt, D. Pekelney, and L. Summers. 2008a. Water Budgets and Rate Structures: Innovative Management Tools. AwwaRF Research Report #91205.
- Mayer, P., W. DeOreo, T. Chesnutt, D. Pekelney, and L. Summers. 2008b. Water Budgets and Rate Structures: Innovative Management Tools. *Journal AWWA* 100(5):117–131.
- McGovern, P.D., D.H. Griffin, and US Census Bureau. 2003. Quality Assessment of Data Collected From Non-English Speaking Households in the American Community Survey. Washington, D.C.
- Melbourne. 2004. Utility Debt Spiral Project. Committee for Melbourne, Melbourne, Australia.
- Michelsen, A.M., J.T. McGuckin, and D.M. Stumpf. 1998. Effectiveness of Residential Water Conservation Price and Nonprice Programs. AwwaRF Research Report #90747.
- Miller, D. and K. Yates. 2006. Climate Change and Water Resources: A Primer for Municipal Water Providers #2973. Denver, Colo.: AwwaRF.
- Mobley, J., E. Tatham, K. Reinhardt, and C. Tatham. 2006. Strategic Planning and Organizational Development for Water Utilities, CD. Denver, Colo.: AwwaRF and AWWA.
- NEADA (National Energy Directors Association). 2008. 2008 Energy Costs Survey. Washington, D.C. June.
- Nielsen, J. 2005. Lower-Literacy Users. Available: <<http://www.useit.com/alertbox/20050314.html>>. Cited 8/16/2007.
- Patrick, R. and C. Kozlosky. 2006. Benchmarking Water Utility Customer Relations Best Practices, AwwaRF Research Report #91096.
- Phillips Jr., C.F. 1993. The Regulation of Public Utilities. Vienna, Va.: Public Utility Reports.
- Prevost, L. 1999. How'd You Get My Name? *Public Utilities Fortnightly* Winter Supplement:12–17.
- Raucher, R. and J. Cromwell. 2004. The Costs of Compliance with Regulations Issued Under the Federal Safe Drinking Water Act Amendments of 1996. Report prepared for the Regulatory Studies Program, Mercatus Center at George Mason University.
- RCAP. 2004. Still Living without the Basics in the 21st Century. Washington, D.C.: Rural Community Assistance Partnership, Inc.
- Rosenhouse, M.A. 1984. Public Utilities: Validity of Preferential Rates for Elderly or Low-Income Persons. *American Law Reports (A.L.R.)* 4th 29:615–622.
- Rubin, S.J. 1998. A Nationwide Look at the Affordability of Water Service. Proceedings AWWA Annual Conference, Dallas, Texas.
- Rubin, S.J. 2005. Census Data Shed Light on U.S. Water and Wastewater Costs. *Journal AWWA* 97(4):99–110.
- Rubin, S.J., R. Raucher, J. Cromwell, M. Hagenstad, J. Lazo, C. Datig and J. Beecheret al. 2004. Background Information and Perspectives on Low-Income Water Assistance Programs: A Report to the Water Utility Council of the American Water Works Association. WITAF Contract #792.

- Ruijs, A., A. Zimmermann, and M. van den Berg. 2008. Demand and Distributional Effects of Water Pricing Policies. *Ecological Economics* 66(2/3):506–516.
- Saunders, M., P. Kimmel, M. Spade, and N. Brockway. 1998. Water Affordability Programs. AwwaRF Research Report #90732.
- Shin, H.B., R. Bruno, and US Census Bureau. 2003. Census Brief 2000: Language Use and English-Speaking Ability: 2000. Available: <<http://www.census.gov/prod/2003pubs/c2kbr-29.pdf>>. Cited 9/25/2007.
- Tatham, E., C. Tatham, and J. Mobley. 2004. Customer Attitudes, Behavior, and the Impact of Communications Efforts. Denver, Colo.: AwwaRF and AWWA.
- Teodoro, M.P. 2002. Tailor Rates. *Journal AWWA* 94(10):54–64.
- USBLS (US Bureau of Labor Statistics). 2008a. Consumer Expenditure Survey, Water and Other Public Services, All Households. Available: <<http://www.bls.gov/cex/>>. Accessed 9/9/2008.
- USBLS (US Bureau of Labor Statistics). 2008b. Consumer Price Index All Urban (CPI-U), Adjusted Annual. Available: <<http://www.bls.gov/cpi/>>. Accessed 9/9/2008.
- US Census Bureau. 2000. United States Census 2000. Available: <<http://www.census.gov>>. Accessed 9/11/2007.
- US Census Bureau. 2006. Historical Income Tables—People. Available: <<http://www.census.gov/hhes/www/income/histinc/p32>>. Cited 9/24/2007.
- US Census Bureau. 2007. Press Release: Household Income Rises, Poverty Rate Declines, Number of Uninsured Up. Available: <<http://www.census.gov/Press-Release/www/releases/archives/income>>. Cited 9/11/2007.
- US Census Bureau. 2008. Median Household Income, Historical Income Tables—Households. Available: <<http://www.census.gov/hhes/www/income/histinc/inchhtoc.html>>. Accessed 9/9/2008.
- USDHHS (US Department of Health and Human Services). 2004. Measures of Material Hardship: Final Report. Available: <<http://aspe.hhs.gov/hsp/material-hardship04/report.pdf>>.
- USDHHS (US Department of Health and Human Services). 2008. The 2008 HHS Poverty Guidelines. Available: <<http://aspe.hhs.gov/poverty/08poverty.shtml>>. Cited 8/25/2008.
- USDHHS (US Department of Health and Human Services) and Office of Minority Health. 2006. Closing the Health Gap 2006. Fact Sheet: Eliminating Health Disparities Among Minority Populations. Available: <<http://www.omhrc.gov/healthgap/2006factsheet.aspx>>. Cited 4/25/2006.
- Vickers, A. 2001. *Handbook of Water Use and Conservation*. Amherst, Mass.: Waterplow Press.
- Victoria. 2005. Inquiry Into the Financial Hardship of Energy Consumers: Main Report. September 2005. Committee of Inquiry into Financial Hardship of Energy Consumers, Melbourne, Australia.
- Vista Consulting Group. 1996. Managing the Revenue and Cash Flow Effects of Conservation. Vista Consulting Group, Inc. AwwaRF Research Report #90686.
- Zedlewski, S., A. Chaudry, and M. Simms. 2008. A New Safety Net for Low-Income Families. Washington, D.C.: The Urban Institute.

ABBREVIATIONS

ADA	Americans with Disabilities Act
AMWA	Association of Metropolitan Water Agencies
ATM	automated teller machine
AWWA	American Water Works Association
CARES	Customer Assistance and Referral Evaluation System
CBO	community-based organization
CBPP	Center on Budget and Policy Priorities
CCHC	Campaign for Children's Health Care
CES	Consumer Expenditures Survey
CIS	customer information system
CKF	Covering Kids & Families
CSR	customer service representative
D/I	disposable income
ECA	Energy Coordinating Agency
EITC	Earned Income Tax Credit
ESL	English as a second language
FBO	faith-based organization
FCC	Federal Communications Commission
FPL	Federal Poverty Level
FRAC	Food Research Action Center
HHS	US Department of Health and Human Services
IRS	Internal Revenue Service
IT	information technology
LEP	limited English proficient
LIHEAP	Low Income Heating and Energy Assistance Program
MHI	median household income
NAMI	National Alliance on Mental Illness
PIPP	percentage of income payment plan
PSA	Public Service announcement
PUC	Public Utility Commission

SBC	system benefits charge
SCHIP	State Children’s Health Insurance Program
SDWA	Safe Drinking Water Act
SFSP	Summer Food Service Program
SLCH	Salt Lake City HEAT
TTY	text telephone
UN	United Nations
US	United States
USF	Universal Service Fund



WATER
RESEARCH
FOUNDATIONSM

6666 West Quincy Avenue, Denver, CO 80235-3098 USA
P 303.347.6100 • F 303.734.0196 • www.WaterResearchFoundation.org



ISBN 978-1-60573-092-9



4004