

# The Growing Concern of Water Affordability

**Over the last decade, customers' water and sewer bills have increased significantly and consistently, outpacing the consumer price index (CPI).**

There are several drivers for these increases, including:



Need for infrastructure repair, replacement, and expansion and the lack of federal grant funding



Lack of necessary rate increases in the past



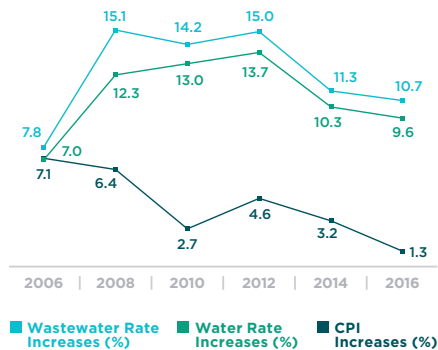
Cost of building resiliency and responding to increasing severe weather events



Need for investments driven by regulation and water quality concerns

These challenges have forced water and wastewater utilities to raise rates higher and more frequently, leaving many customers struggling to pay their bill and utilities wrestling with their own long-term financial sustainability. As the focus on water affordability intensifies, utilities are looking for solutions for their customers while they continue to provide safe, clean water and maintain financial sustainability.

**Rate increases versus CPI increases over the last decade (as a percentage) →**



Source: AWWA / Raftelis 2016 Water and Wastewater Rate Survey



**Raftelis is working to find better ways to determine and address utility affordability.**

With more than 70 specialized consultants, Raftelis has the largest and most experienced water, wastewater, and stormwater utility financial and management consulting practice in the nation. Our staff have assisted more than 1,000 utilities across the U.S. and Canada.

Raftelis has worked alongside utilities, regulators, and industry associations to help further the discussion on measuring affordability and applying affordability metrics properly. Our staff are helping to address affordability issues as members of association committees, authors of leading industry guidebooks, researchers on the joint AWWA/NACWA Water Affordability Project, speakers at national symposia and conferences, and authors of articles on the topic.

We have successfully applied these concepts in the real world by evaluating affordability and implementing programs for major utilities across the country, like Philadelphia, Washington, D.C., Austin, Phoenix, and Baltimore.

Additionally, as we help to develop affordability solutions for our clients, we are careful to take into account the financial sustainability of the utility and the financial and organizational implications that the affordability program will have on the agency.

**We bring industry thought leadership coupled with practical application of these concepts to help utilities provide affordable water for all.**

Want to learn more?

Visit [www.raftelis.com](http://www.raftelis.com) or email us at [affordability@raftelis.com](mailto:affordability@raftelis.com)



# Affordable Water for All.



# What is Affordable?

Affordability is commonly defined as the ability of individual customers to pay for services that are adequate to meet their basic needs, while maintaining the ability to pay for other essential costs; the key is that affordability must be evaluated at the individual customer level. Using the percent of median household income proxy to measure affordability, as outlined in the EPA's 1997 Guidance, has its shortcomings. Several other metrics have emerged that focus on individual customers, account for essential non-utility costs, and concentrate on low-income customers, utilities' most financially vulnerable customers. Raftelis understands the importance of selecting appropriate metrics for measuring affordability and for setting program-level policies. In addition, we are working with other industry leaders to develop new metrics to help utilities develop effective programs to meet their customers' household affordability challenges.

## Affordability Ratio

Ratio of basic water and wastewater services to disposable household income using median household income, poverty level income, or 20<sup>th</sup> percentile income

- Advantages**  
Addresses essential needs
- Disadvantages**  
Data intensive  
Difficult to communicate

## Percentage of Poverty Level Income

Using assumed household size, cost of basic water and wastewater services calculated as a percentage of poverty level income

- Advantages**  
Focuses on low-income customers
- Disadvantages**  
No adjustment for regional cost of living differences

## Minimum Wage Hours

Uses U.S. federal minimum wage or state or local minimum wage to calculate water and wastewater affordability, can be scaled based on household size

- Advantages**  
Simple to calculate  
Easy to understand  
Provides a local indicator
- Disadvantages**  
Does not consider essential goods/services  
Not easily translatable to a program eligibility requirement

In response to concerns about affordability, many utilities are seeking to enhance customer assistance programs, provide funding to customers to make water bills more affordable, or build affordability measures directly into their rate structures.

# Making Water Affordable

Reaching vulnerable customers and implementing effective programs requires a multi-faceted approach. Shown below are some common elements that utilities are utilizing to address affordability concerns.

### Customized Affordability Program

An affordability program developed for a utility's specific situation and customer base

**Conservation Assistance** Water audit for high usage customers, fixes to fixtures and leaks, or loans to assist with repairs

**Senior Citizen Discounts** Customers 65 and older at or below a minimum income level receive a discount on utility charges

**Payment Agreements** Customers with an overdue account balance are offered payment agreements to avoid shutoff

**Matching Grants** Periodic grants to low-income customers to lower debt and reduce ongoing monthly bills

**Emergency Assistance** A one-time assistance payment to help customers in times of financial emergencies

**Debt Forgiveness** Conditional forgiveness of all or a portion of past debt based on good payment history

### Affordability-Friendly Rate Structures

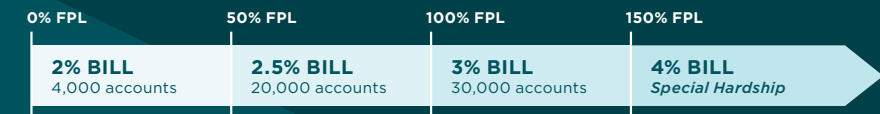
A rate structure that enhances your affordability message - variable charges allow customers to reduce their bill by conserving

This graphic shows how affordability friendly these rate structures are



# Philadelphia's TAP

The Philadelphia Water Department is one of the largest utilities in the nation, providing water service to 1.7 million people. With a poverty rate over 25%, the city is also one of the most economically challenged cities in the country. In 2017, the Philadelphia Water Department implemented the Tiered Assistance Program (TAP), which aids income-eligible customers through fixed monthly bills that are based on household income. The program is available to customers with household income at or below 150% of federal poverty level, and customers with special hardships at any income. Approved program participants receive monthly bills that range from 2 to 4 percent of their household income with respect to the current Federal Poverty Level (FPL). Raftelis managed the development and implementation of this program and provided PWD with extensive program, financial, technology, and communications support.



Number of accounts is approximate and refers to total number of accounts at that FPL, not necessarily the actual number of eligible accounts.

Raftelis used several visualization tools to measure and demonstrate affordability concerns.

This map shows potential pockets of financial burden in the City based on a typical bill as a percentage of MHI.

