

WATER UTILITY EXECUTIVE JANUARY - FEBRUARY 2015



Special Issue: 2014 UFI Survey Results

Updated UFI Database Provides New Insights into Utility Finance

Revenue per capita is increasing. Projected rate increases are lower than past annual increases. The increase in median debt per capita took a slight pause in 2014. These are just a few nuggets of information from AMWA's fourth biannual Utility Financial Information (UFI) survey. The survey results were released in January in a new UFI database that provides in-depth financial information on the 102 utilities that participated in the survey in the fall of 2014.

Since the survey closed in December, AMWA's survey contractor Raftelis Financial Consultants (RFC) compiled and analyzed the raw data. Several key analyses are provided in this issue of *Water Utility Executive*, including some analyses that include results from prior surveys conducted in 2008, 2010 and 2012. RFC notes that the trending analyses are not based on the same group of utilities from survey to survey. The intent of these analyses is to indicate potential trends for the industry as a whole, and RFC provides brief editorial comments as part of each analysis.

The selection demonstrates the breadth and depth of analyses possible using the UFI database and represents a wide variety of data for comparison. It is, however, only a small fraction of the analyses possible, and members are encouraged to mine the data for useful statistics and use it to create reports most pertinent to their own operations. Since survey participants include only the nation's largest water agencies, the data is extremely relevant and valuable for comparison.

At a webinar planned for February 24 at 2:00 p.m. ET, RFC will discuss the survey results and provide examples of productive ways to use the data.

Utility Rate Structure

The majority of responding utilities utilize increasing block rate structures (59%) for residential customers, with uniform structures (29%) being the second most common structure.

Residential Rate Structure





For those responding utilities with distinct charges for commercial customers, uniform rates were most common (51%) followed by increasing block structures (30%).

Commercial Rate Structure



Operating Costs and Revenue

The results show that, for the responding utilities, revenue per capita is increasing. The trending analysis also suggests that utilities are attempting to keep operations and maintenance (O&M) costs in check, which further suggests that the increasing total revenue is being spent on rising capital costs. The

Median Operating Costs and Revenue per Capita



overall nationwide trend of declining per capita consumption may explain the somewhat flat trend in O&M costs. Less water usage would lead to less chemical and energy costs as well as less supply costs for those utilities that secure a portion of their water supply through purchased water, even as the unit cost for those expenditures inflates over time.

Median Operating Costs and Revenue per Capita



Water Revenue

Nearly 88% of a utility's water revenue is generated from base and volume charges while approximately 12% is collected from miscellaneous charges, interest income, etc.

Average Percentages of Water Revenue



Also of interest are the proportions of water sales that are recovered from base and volumetric charges. Generally, base charges provide more stable revenues but afford the customer less control over their bill, whereas volumetric revenues are often more volatile yet provide the customer incentive to consider the impacts of their usage. For the utilities that responded to this question, the average breakdown of total water sales revenue is 75% from volumetric and 25% from base, or fixed, charges.

Average Breakdown of Water Sales Revenue



Water Source

Impact of Water Source on Median Customer Bill



Percentage of Utilities by Water Source



The median monthly bill is based on 10 hundred cubic feet (Ccf) or approximately 7,480 gallons. In 2014 the hybrid (multiple water source) approach tended to produce the highest customer bill, whereas utilities utilizing more groundwater tended to produce lower customer bills. To classify utilities, it was assumed the utility must obtain over 75% of its water from the particular source to fall in the respective category. If there is no predominant source, the utility is classified as hybrid.

Impact of Water Source on Median Customer Bill



2008 2010 2012 2014

This multi-year chart shows the trending analysis from 2008 to 2014 and evaluates the customer impacts of the median customer bill in relation to the primary type of water source for the utility. The results show that depending on the year, significant increases in the median customer bill are experienced under all types of utility water sources, most recently the hybrid water source.

Budgeted Transfers

Number of Utilities with Type of Transfers



Average % of Transfers of Total O&M



Two-thirds (66%) of responding utilities have some type of budgeted transfer. The median total transfer of all applicable transfers per utility for this group of utilities is 8.6% of the total O&M Cost. Payments in lieu of taxes (PILOTs) and indirect cost allocations are the most prevalent types of transfers. It should also be noted that while dividends appear to be the most sizeable type of transfer, only one responding utility included an amount of dividend payments. Consequently, though not insignificant, this type of transfer is less representative of the responding utilities.

Previous Rate Increases

Average Annual Rate Increase Since 2000



Median Average Annualized Rate Increase = 3.9%

The above chart indicates the distribution of the average annual rate increases from each year of the survey. Note that the results are cumulative with each survey providing an additional two years of data. Generally the distribution has consistently centered on 2 to 4% per year increases, with the exception of 2012, with the modal response indicating increases in the 4 to 6% range. While the typical annual increases have been in the 2 to 4% range, there is a significant amount of variability from year to year. Some utilities may have no increase for five years and then increase rates 15% while others may consistently increase rates 3% per year over that same five year period.

Previous and Projected Future Rate Increases

In the 2014 survey, responding utilities indicated projected rate increases that were less than past annual increases. This is in contrast to the 2010 and 2012 surveys, which indicated that projected rate increases were likely to be higher than past increases.



Median Past vs. Median Future Rate Increases

Capital Improvement Costs

The chart below indicates some volatility in projected capital improvement program (CIP) expenditures. Projecting capital costs in present-day dollars instead of inflated dollars is just one reason for a large amount of variation over the CIP forecast. Note that the median utility is projected to spend around \$25 million per year or \$250 million over the 10 year period, before accounting for any cost inflation.





Ratio of Capital Cost to Total Budgeted Costs

The data shows that more than half of the utilities that responded (57%) earmarked 25%-50% of their budget for capital projects or payments.

Capital Spending % of Total Budget



Utility Debt

Revenue bonds are the primary means of funding for capital projects. General obligation bonds and loans account for only a small percentage of capital funding utilized by utilities. In general, median debt per capita appears to be increasing, with a slight pause in that increase in 2014.

Median Debt per Capita





Median Debt per Capita



Utility Unrestricted Reserves



Half of the utilities responded as having 47% or less of the total annual costs in unrestricted reserves. The 2012 survey indicated a median figure of 32%. The most common range reported was 25% or less. Though the circumstances that drive reserve policies are particular to individual utilities, 25% is generally a minimum reserve level targeted by utilities.

Customer Monthly Bills

Utilities were asked to provide the monthly bill at the level of consumption for their typical customer. The median bill at this level of consumption along with the median monthly bill at 5 Ccf and 10 Ccf are shown. The median bill at 10 Ccf has steadily increased over the past four surveys as depicted below.

Median Customer Monthly Bill



Median Customer Monthly Bill (10Ccf)



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Typical Customer Consumption

While 10 Ccf (7,480 gallons) is an often-used level of consumption to represent the typical customer within the industry, the reality is that the "typical" customer and their respective level of consumption varies from utility to utility. Pricing, local conservation efforts, availability of water and many other factors influence the customers' consumption. The results of the survey show that the median level of consumption among typical customers is 8.24 Ccf (6,168 gallons), and that 60% of utilities have typical customer consumptions between 5 and 10 Ccf.



Typical Customer Monthly Consumption

At www.amwa.net/ufi, utilities that participated in the 2014 survey can access the new database. Details on the February 24 UFI webinar are also found on the UFI webpage.

AMWA Welcomes New Members

AMWA is pleased to welcome as new members City of Bozeman Public Works, represented by **Craig Wollard**, Director of Public Works, and Polk County Board of County Commissioners -Polk County Utilities, represented by **Marjorie Guillory Craig**, Utilities Director.

Register for International Water and Climate Forum

Registration is now open for the 2015 International Water and Climate Forum, scheduled for December 7-9 in San Diego. Focusing on the implementation of climate adaptation and mitigation strategies, the Forum will provide urban water utility managers with ideas, tools and resources for mainstreaming climate change considerations into their strategic planning and operations.



The Forum is organized by AMWA, Water Research Foundation, American Water Works Association, International Water Association, Water Services Association of Australia and Water Utility Climate Alliance.

Visit www.waterclimateforum.org for more information.

AMWA Launches 2015 Awards Program

n January, all eligible AMWA members were invited to apply for recognition in the association's 2015 awards programs: the Gold Award for Exceptional Utility Performance, the Platinum Award for Utility Excellence and the Sustainable Water Utility Management Award.

Winners will be recognized at AMWA's 2015 Annual Executive Management Conference in Savannah, Georgia, October 11-14. The deadline for submitting Gold Award applications is June 1, the Platinum Award deadline is June 15 and Sustainability Award applications are due by July 1, 2015.

Additional information is online at www.amwa.net/awards.

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Bob Woodward, Gina McCarthy Headline 2015 Water Policy Conference



Bob Woodward, Associate Editor The Washington Post



Gina McCarthy, Administrator, U.S. Environmental Protection Agency

AMWA's 2015 Water Policy Conference will feature a top Washington observer, the head of the U.S. Environmental Protection Agency and key Capitol Hill lawmakers. Scheduled for March 22-25 in Washington, D.C., the meeting will also host interactive discussions on water reuse guidelines, Lead and Copper Rule revisions and EPA's new Water Infrastructure Finance and Innovation Act (WIFIA) Ioan program.

Headlining the conference will be **Bob Woodward**, Pulitzer Prize-winning associate editor of *The Washington Post*, who will discuss where recent presidential administrations have gone right and wrong in policymaking and will highlight what to look for as President Obama and congressional Republicans stake out their positions in the coming year.

EPA Administrator **Gina McCarthy** will deliver the keynote address on EPA's efforts to help the nation's water utilities improve water quality and quantity, upgrade infrastructure and build resilience in the face of a changing climate. **Peter Grevatt**, Director of the EPA Office of Ground Water and Drinking Water, will provide an update on regulatory actions to expect in 2015 and beyond.

Confirmed guests from Capitol Hill will discuss water issues on the Congressional agenda: House Environment and the Economy Subcommittee Chairman John Shimkus (R-III.) and Ranking Member Paul Tonko (D-N.Y.), House Water Resources and Environment Subcommittee Chairman Bob Gibbs (R-Ohio) and Ranking Member Grace Napolitano (D-Calif.), Senator Ben Cardin (D-Md.) of the Senate Environment and Public Works Committee, and Rep. Lois Capps (D-Calif.) of the House Energy and Commerce Committee.

The interactive sessions will offer opportunities for participants to ask specific questions and provide direct feedback to decision makers at EPA. In addition, three sessions are scheduled featuring management subjects of interest to water utility CEOs: **Mark Kim** of DC Water on innovative financing strategies, **Mark LeChevallier** of American Water on the business case for aggressive innovation, and **Steven Bonafonte** of Pullman and Comley on liabilities that may arise from cybersecurity breaches.

Register for the 2015 Water Policy Conference at www.amwa.net/2015WPC.



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