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A RESET FOR RATE SETTING:

It is past time to modernize our approach to water and sewer pricing and cost accounting

Rate setting is one of the most prevalent–and even tiring–topics for many utility executives. Rate setting essentially evolved in regulated environments as a way to keep pricing fair. But "fair" is admittedly a relative term. Today's changing landscape begs some important questions: What is "fair" and who defines it? Are prices really fair, and for whom? In this piece we look at the history of today's pricing model and how you might be able to influence change for your organization, your customers and the industry as a whole.

The traditional model: equal isn't always fair

To put it simply, current water and sewer pricing standards are based on static allocation models from the 1960s and 70s, which assign cost to process and assets rather than value creation. While certainly convenient, the model tends to create imbalances. We could go so far as to call them arbitrary if we look at it from a big picture view, given that pricing tends to be based on the absolute of asset locality. It also raises important questions of what is logical and equitable (and thus "fair") when it comes to pricing and who is being asked to shoulder which costs in the building and maintenance of sewer systems.

Little distinction between fixed and variable costs

Since the 1980s-90s, cost-based accounting principles (which recognize the subtle relationships between costs, overhead activities and products generated) have been widely accepted as logical by most industries. Yet, the water and sewer industry tends to instead look at cost accounting through more of an engineering lens. We tend to focus on one-dimensional components such as miles of pipe rather than what is driving costs in the first place or who is deriving value from a given service or system.

That leaves us with a big, chronic disconnect between cost generation and allocation, often placing the greatest burden on the citizens and systems who are least able to afford it. Costs rise, revenue falls, systems age, unfunded mandates are issued… and so the vicious cycle goes. And it's particularly pronounced when an area takes an economic hit.

In trying to address the challenges created by this model, water and sewer system CFOs can feel hamstrung to say the least. For one, state statutes may inhibit your ability to implement affordability programs. Additionally, you may be limited by agreements you have with nearby communities. This can leave many organizations stuck with more costs than with power to change things.

Let's consider a typical scenario: A given city's customer base has to pay based solely on the number of sewer miles that sit underneath the city. But the population above ground may have not be the same citizens receiving the benefit of that system. What about cases of suburban sprawl, or flights from cities to suburbs which some view as allowing citizens to essentially run away from fixed costs? What if neighboring areas around that city benefit from the infrastructure, but don't help cover its costs? Would that model be considered logical in any other industry or business? It's doubtful.

The old model of cost allocation is simply not that cut and dry. We're insisting on trying to compartmentalize a system that can't be compartmentalized. Until thought leaders, influencers and decisionmakers stop to assess the logic of our current pricing model, the model will prevent us from taking a broader view and will even suppress revenue with an all-or-nothing approach that allows for little elasticity in pricing. Rate setting must be brought into the modern era, or this imbalance will continue to cripple utility systems and their customers even further.

Time for a new view: Repair the disconnect with more elastic pricing models and more modern cost allocation methods

Water and sewer CFOs should step back and ask critical questions.

- Who receives the value from a water system?
- What are the drivers of incremental costs in the system? What costs are truly fixed?
- Does the current pricing model fit the modern context in which utilities operate?
- Has water and sewer rate setting kept pace with modern cost allocation principles?
- Are we properly accounting for changing demographics?

For instance, urban sprawl has showcased a glaring disconnect between value received and value funded by individual customers. With urban sprawl, relocation patterns, blurring lines between population centers, and shifting demographics, we'd be remiss not to ask if the current rate methodology serves our organizations and our communities as efficiently and effectively as possible. In adhering to old ways of thinking (e.g., rigid polices against lowering rates out of fear they will reduce revenue), are we actually contributing to the imbalance and infrastructure decline?

The reality is, many water system executives agree that if we took a more elastic approach to pricing, we could actually increase revenue, solve a few central root-cause issues rather than patch over them, and deploy limited infrastructure and financial resources more effectively.

Making the case for a new approach: actions you can take

To a beleaguered CFO with many competing priorities, reconsidering pricing strategies may seem insurmountable, a system too big to confront. But by being willing to reexamine how we're doing business, we could create surprising results. It's important to start somewhere, and here are a few actions you could take now.

Convene an affordability panel. This can help get conversations out of hallways and departmental silos and on the table for key stakeholders to see and discuss. You can use this structure to ask some of those important questions noted above, talk about your reality, anticipated challenges, and assumptions. A panel can also provide a great forum for coming up with local and regional solutions and creating buy-in among players who may not normally interact with each other. The panel should determine what is the optimal rate model for their community and assess whether costs are being properly allocated amongst users. Further, the panel should report to some higher power that can make the change effective (e.g., city council, board of directors, etc.). Lastly, the panel's work needs to be made public so that the community can align and voice their agreement, encouraging implementation.

Find unique ways to address affordability. There's a good bit you can do beyond mere rate reduction or subsidies. For instance, grants to help replace inefficient toilets or allowances to repair leaks can give consumers some relief and help them better afford their monthly bills.

Connect with similar entities. If you're in a pricing-revenue predicament, look for other water utilities who are facing or have successfully faced similar challenges. Share ideas and learnings. You may uncover ideas that work for your system.

Look at what data you have, and what data you need on your assets, customer usage and income, and other critical aspects of your business and customer base. How can you use and repackage it to make a case for rate relief, rebalancing of cost sharing with neighboring entities, etc.? Do you have data you're underutilizing? Do you have gaps in your ability to track and report on the true value your assets are creating?

Run models and what-if scenarios on rate changes. It's surprising how many municipal utilities don't do these exercises. They can be a big help in testing and challenging assumptions within your team and in making an external case for change. While you may not have large or highly technical staff to run analyses, this is important enough that you should consider creating an internal task force or hiring an external consultant or contractor to help.

Look at how you might be able to adjust any current programs for greatest impact. As you consider the effectiveness of your existing programs, is there anything you can do to improve your cost allocation or payment rates? For instance, most affordability programs today focus on eliminating past dues for a particular individual to keep services on in the short-term. However, this doesn't fix the problem – once the temporary subsidy is over, they have the same high rates and fall back behind. So, in this case, it would behoove utilities to assess how many repeat customers are entering the program – if the number is high then you're just wasting time and money that could be better served with a permanent subsidy and used to help others as well.

Be prepared for skepticism by having solid data to back up your ideas. Rate and cost conversations are not easy. The process can be politically charged to say the least. By having solid quantitative and qualitative data you can better you can understand and address the challenge.

Find opportunities to beat the drum for change. If you care about operating in a financial model that's logical and as close to fair as possible, it's important to raise this issue whenever you can. In part we've fallen into the model because it hasn't been kept top of mind. Are you in any membership groups, professional association or speaking opportunities where you can raise this issue consistently? It's up to each of us to be a voice for change for our communities.

Don't worry about having perfect information before pushing this issue. It's okay if your analysis isn't perfect. The important thing is to start somewhere – develop hypotheses, test through discussion, and refine. And while you may not have all the data you need, you can get very basic but useful data such as salary and migration patterns within your region.

The power of price modeling

The city of Detroit offers just one case in point in terms of how revealing some simple price modeling can be.

The city was struggling greatly with balancing cost and revenue, as demographics began changing. Citizens were leaving in droves for the suburbs, and those who chose to stay were facing economic hardship because of falling income and rising unemployment. Even though the city was constrained in its ability to adjust pricing or re-allocate costs with nearby areas which were benefiting from the city's infrastructure, a price modeling effort was undertaken.

The finance team calculated likelihood of getting paid or being forced to eventually shut off certain households based on recent income data, using it to model the effects of price elasticity. They ran various scenarios, ultimately revealing that even a mere 1% decrease in costs could drive a 10% increase in revenue capture for the city's water system.

By using data in this way, and being a voice for change, you can ultimately create a win-win: give the customer a more affordable rate, borrow from proven best practices in accounting (from non-utility industries), and raise revenue --despite the fact that it might seem counterintuitive to some naysayers.

Be prepared to compromise. In negotiations regarding rates and cost allocation, you may not get everything you want. But by making a thoughtful, data-driven case to those in your sphere of influence, you might be able to make some progress and even find some middle ground. In the process you may get some compromises that benefit your organization and the customers you serve.

A battle worth fighting

The entire model of pricing for water and sewer services is ripe for a challenge, especially given the recent impact of the pandemic on consumers, businesses and state and local agencies and some of these very imbalances that have been placed under a very bright spotlight.

It's understandable that that if you are part of a larger system this can pit one system against another. Or you may simply be weary of budget battles. But this battle is one worth fighting, one that would bring some much-needed logic to our industry.

It's a conversation worth having, especially if you are in a position where you or your citizens are negatively affected by irrational or arbitrary pricing. After all, our goal is to serve our communities well – so we want rates to be allocated fairly and logically, and to follow sound business principles. Other high-performing industries have effectively embraced modern ideas of cost allocation and pricing to value. So why not ours? It may be time to take a page from them.

By stepping back and looking at rate setting through a fresh lens, we can look beyond helping people pay and look at a systemic solution, create a true balance that benefits our communities and agencies alike for decades to come.

About the Author

Marcus has more than 25 years of financial and cross-functional executive leadership experience across industries including municipalities, utilities, and manufacturing. Marcus served as the Chief Financial Officer and Treasurer at both Detroit Water and Sewer System and Wayne County (MI) Airport Authority. He has a particular passion for helping fellow municipal executives navigate changing industry dynamics and apply best practices to optimize operations, satisfy stakeholders, and provide delivery excellence to their member organizations and communities. Marcus currently serves as Executive Director of Calderone Advisory Group, LLC. He is a Certified Public Accountant, Certified Managerial Accountant, Certified Turnaround Professional, Certified Insolvency & Restructuring Advisor, and series-3 Certified Trading Advisor. Marcus holds a Master of Business Administration degree from the University of Michigan, Ross School of Business, and a Bachelor of Arts in Accounting from Michigan State University.