

# 10 Steps TO DEVELOPING UTILITY RATES

Utilities such as water, wastewater, stormwater, and electricity can struggle to develop rate structures that fund ongoing service while not unduly burdening customers. GFOA developed the following steps based on the methodology in the American Water Works Association (AWWA) publication, *M1 Principles of Water Rates, Fees and Charges*. The AWWA is one of GFOA's valued partners on a number of initiatives. And while the principles were developed for water-related utilities, they can be applied to any utility service type.

**1 Start with a confident set of financial statements, including available assets and historical data.** Ideally, you can begin with a set of audited financial statements to understand your utility's financial position for the current year and the prior two years. This provides a solid foundation of financial information so you can better understand and project future spending based on current and historical financial trends.

**2 Understand ongoing fixed and variable operating costs.** What's needed to cover ongoing operations? Using your historical trends and current baseline, what are the fixed costs for continued operations? What are the variable costs, such as the purchase of treatment materials or commodities that are consumed by your customers? Use trend analysis to create operational expense projections for the next 5 to 10 years. Even fixed costs may increase as capacity levels increase (e.g., new facilities can equal new costs). Assess how efficient your spending is; lower

expenses reduce revenue requirements and future rates.

**3 Evaluate the condition of your assets.** What needs to be replaced? What needs to be upgraded due to increased (or decreased) consumption demands? What investments are needed to continue ongoing operations?

**4 Develop a long-term capital plan.** Incorporate your condition assessments with new capital projects that will be needed over the next 5 to 10 years. This includes maintenance of existing assets, investments needed for future regulatory requirements, and expanding your service area. Sometimes there will also be unexpected, costly projects or mandates.

**5 Identify desire and capacity for issuing debt to fund all or a portion of your capital plan.** Funding your capital program is a critical component of your rate model. What is your utility's interest and capacity to issue debt? Do you prefer to fund capital using a Pay As You GO model? A portion of your rate model will be used for ongoing capital investment; optimize the mix of debt and PAYGO to ensure your key capital projects can be completed.

**6 Develop a long-term (5 or 10 years) cash flow model to calculate revenue requirements.** Combine ongoing operational expense projections, capital improvement plan, and debt model to develop a comprehensive cash flow model. This model should include the ability to identify the overall revenue requirements, project cash balances, and other key financial KPIs.

**7 Analyze customer mix, including utility consumption.** Since costs will be borne by your customers, you need to understand your customer base. Does it include large retail, office, or industrial? How much utility service do they consume, compared to residential properties? Are residential customers mostly high consumption, or do you have a large contingent of residential customers that are struggling with affordability? Ultimately, this is an assessment of revenue risks.

**8 Determine how much of your required revenue should be funded by fixed fees and how much should be funded by consumption.** Rate structures apportion costs among customers. Conduct a cost-of-service analysis where system costs are allocated to system functions and then to cost drivers—for example, “customer-driven” drivers as opposed to “demand-driven” drivers. Also, determine if fixed amounts need to be collected per customer (or dwelling unit or other criteria) to ensure enough revenue for bond covenants, etc.

**9 Estimate typical customer bills, considering affordability and customer assistance plans.** Estimate typical customer bills to evaluate affordability. Consider developing a customer assistance program with clearly defined program rules and eligibility, and determine funding sources for it.

**10 Establish rates that cover the full cost of operating the utility, including capital and debt, over the 5- or 10-year term.** Capture the full cost, including operational expenses, capital projects, and funding long-term capital investments. Establish rates that cover the full cost of the utility, including operating expenses, capital, and debt. ■