



**City of Austin
Austin Water Utility**



**Cost of Service Rate Study 2008
Project Overview**

August 2009

INTRODUCTION

The Austin Water Utility has conducted a comprehensive study to update and improve its methods for determining fair and defensible rates for its services. The study used accepted cost of service principles that seek the most equitable ways to link the cost involved in serving each category of “class” of customer (e.g., residential, multifamily, commercial, large volume or wholesale) with the amount each pays.

The study started in November 2007 was completed in April 2009. The timeframe meshed with the City’s budget cycle and the new rate methodology is scheduled to be ready for use beginning in November 2009.

The Austin City Council made a commitment to cost of service principles in 1992. A second study in 1999 updated the cost of service methodologies, and the Council again adopted the rate-setting methods which have been used since that time.

In conducting a rate study, the Utility’s job is to balance and reconcile the interests of all its customers. This means “cutting up the pie” of costs, in light of the fact that any costs not covered by one customer class must be borne by the others. Rate studies are always controversial, because each customer class would like to shoulder less of the total rate burden by having other customer classes pay more.

The current rate model has been updated each year since 1999; now it is time to start with a clean slate and set up the best rate model for today’s circumstances.

A team of rate consultants led by Red Oak Consulting was contracted by the City to assist with updating and improving the existing rate methodology. The Red Oak team included nationally recognized consultants with experience in dozens of similar projects. They performed the technical work to build a rate model and also advised the City regarding legal and regulatory rulings on acceptable methods, common practice in other utilities, and recent advances in rate methodology.

The Utility set several goals for the new rate methodology. It must be:

- Fair to all customer classes
- Solidly defensible in the face of legal challenge from any customer class
- Implementable using the data and resources the Utility has available
- Capable of providing the revenue the Utility needs to carry out its mission
- A reflection of as much consensus as possible
- Able to adapt to the rate-setting needs of the next seven (7) to ten (10) years

WHAT IS A COST OF SERVICE RATE STUDY?

Costs of service based rates have become common throughout the United States because the courts and regulatory agencies have ruled that they provide a fair basis for sharing the rate burden. Using cost-based rates helps protect the City from the high cost of defending its rates before regulatory agencies that have the authority to reverse utility rate decisions. Prior to the original 1992 Study, the City has had to spend millions in legal costs defending its rate methodology. The Utility would like to avoid these costs in the future.

Water Cost of Service Calculation Steps

DETERMINE \$\$\$ NEEDED

The first step is to calculate how much revenue the Utility needs to collect from water rates. This takes into account operations and maintenance (O&M), debt service or depreciation, and all other costs.

ASSIGN EXPENSES TO SERVICE FUNCTIONS

Expenses are assigned to the functions that generate them. The functions include supply, treatment, transmission and distribution, customer accounting, fire hydrants, administrative and other functions. The total of all function costs is equal to the total revenue needed.

ASSIGN EACH FUNCTION'S COST TO COST COMPONENTS

The total cost of each of the functions is then divided into types of costs called "cost components". Cost components typically include the cost of providing base volumes of water, maximum day/hour costs, customer metering and billing costs, fire protection costs, and so forth.

ALLOCATE EACH COST COMPONENT TO EACH CUSTOMER CLASS BASED ON ITS PROPORTION OF USE

The total for each cost component is then divided among the customer classes in accordance with the total use each customer class makes of that component. Classes that use more of a given component pay for more of that component. This step and the two that precede it are collectively called "cost allocation".

RATE DESIGN

The amount that each customer class must pay per 1,000 gallons of water and as a monthly billing charge to defray its fair share of the total revenue needs is calculated. A rate model will be used in this case.

Wastewater Cost of Service Calculation Steps

DETERMINE \$\$\$ NEEDED

Just as with water rates, the first step is to calculate the total revenue requirements, including for operations, maintenance, capital costs, and debt service or depreciation.

ASSIGN EXPENSES TO SERVICE FUNCTIONS

Expenses are assigned to the activities that generate them. The functions for wastewater include collection, treatment, customer accounting and administration.

ASSIGN EACH FUNCTION'S COST TO COST COMPONENTS

The total cost of each of the functions is then divided into types of costs called "cost components". Cost components are typically divided into volume/capacity; measures of sewage strength such as Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS); customer metering and billing and sometimes other categories.

**ALLOCATE EACH
COST COMPONENT
TO EACH CUSTOMER
CLASS BASED ON ITS
PROPORTION OF USE**

The total for each cost component is then divided among the customer classes in accordance with the total use each customer class makes of that component. Classes that use more of a given component pay for more of that component. This step and the two that precede it are collectively called “cost allocation”.

**RATE
DESIGN**

For wastewater, all customers pay a monthly billing charge and a volume charge based on the number of 1,000 gallons used. However, separate charges are also levied on some customer classes for the number of pounds of BOD and TSS their wastewater contains above the standard level.

How the Rate Model Will Be Used

The same rate model (method of calculating cost of service) is used every year, and a rate model can often be used with only minor modifications for five or more years. Thus, every year the same methods are used to divide up the rate burden. However, the revenue requirements and customer class consumption are recalculated every year. So the actual amount charged to a customer class per 1,000 gallons of water or wastewater service may vary from year to year, even though the same rate model is still in use.

What a Cost of Service Study Is Not

The Cost of Service Study is limited in some ways. It does not cover management issues or how utilities plan and execute their work, for example. Nor does it address personnel matters, except in the sense that revenue to pay employees is part of the overall revenue requirement.

Conducting a cost of service study does not mean that all rates will automatically be set at cost. Although the City has used a cost of service based system since 1992, today most residential customers pay less than what the current rate model indicates is the actual cost of service, while some customer classes pay more.

Policy decisions based on the need to avoid sudden changes in rates, to create incentives for conservation, and to address other policy goals also play a role in virtually every rate methodology. For example, below-cost rates for the first few thousand gallons of water or wastewater service are often established to ensure that service is available to those with limited incomes. The City’s current rate structure includes increasing charges for larger-volume residential water use to encourage conservation.

HOW ARE RATE DECISIONS MADE?

The ultimate authorities on water and wastewater rates in the State of Texas are the Texas Commission on Environmental Quality (TCEQ) and courts of law. In most cases, the TCEQ does not dictate how utilities should set rates, but it will step in if outside-city or wholesale ratepayers protest that unfair rates are being charged. When such a protest is lodged, there is an administrative law proceeding much like a trial through which the TCEQ determines how rates have been set and decides on a remedy if rates are deemed unfair.

Within the limits set by potential TCEQ or court involvement, the Austin City Council makes the final decisions about rates charged by the Austin Water Utility.

Within the Utility itself, an Executive Committee composed of the Utility Director, Deputy Director, and Assistant Directors decides what the Utility’s rate recommendations to the City Council will be. The group will review work done by the Utility’s Financial Management Division and its consultants

and take comments received from the public into account in making decisions about Cost of Service Rate Study 2008 recommendations.

The Water and Wastewater Commission is a City Council-appointed entity charged with advising Council members on water and wastewater issues, including making recommendations on rates. The Commission meets monthly and anyone may attend and comment at its meetings. For the Cost of Service Rate Study 2008, the Utility will update the Commission on project progress throughout the study and the Final Report will be presented to the Commission for their review and comment.

A Public Involvement Committee (PIC) was been formed for this study and included representatives of all customer classes. The PIC discussed key issues and made recommendations to the Utility and the project team. One water and wastewater commissioner also served as a PIC member.

WHAT ARE THE BIG ISSUES?

Although the basic steps of a cost of service study are well-defined, professional judgment and policy considerations come into play in determining how to carry out these steps. The Utility identified several issues that have been of concern to customers or are perennially difficult. The Utility provided “issue papers” written in non-technical terms to provide an overview of these issues for discussion purposes. They are:

- **Revenue Requirements.** How to calculate how much revenue the Utility needs and express this for cost allocation purposes (e.g., cash basis, utility basis, or cash residual calculation), fund balances and reserves.
- **Water Cost Functionalization & Allocation Methodologies and Fire Protection.** The criteria used to decide which facilities are serving whom and in what proportion (e.g., commodity demand, base-extra capacity). The fire protection discussion was to focus on how the costs for fire protection service provided by the water system was to be determined and further how should these costs be allocated to customer classes.
- **Wastewater Cost Functionalization & Allocation Methodologies and Inflow & Infiltration (I/I).** The criteria used to decide which facilities are serving whom and in what proportion (e.g., Flow, BOS, TSS). Inflow & Infiltration discussion focused on how should the costs associated with I/I in the wastewater system was to be allocated to customer classes.
- **Customer Classification.** Review current customer class makeup and revised if necessary.
- **Rate Design.** (Consisted of two meetings) How should Austin Water Utility rates be designed to meet City policy objectives for equitable cost recovery, water conservation, social-economic, and other goals?
- **Decision Analysis and Modeling.** Reviewed the decisions reached by the Executive Team and previewed a draft of the water and wastewater models. PIC members were also allowed to recommend “what if” scenarios for the models.
- **Model Preview.** The PIC members were allowed to preview the new models and the resulting rates for the selected “what if” scenarios.

COMMUNITY PARTICIPATION

The Utility established a public involvement program as part of the study to ensure that all customers can have a voice in the process.

The project webpage address is www.ci.austin.tx.us/water/. It includes information about the project and when and where meetings were held and the corresponding agendas.

During business hours anyone wishing to review the data used in the study may visit the Utility's Information Library on the 5th floor of the Utility offices at the Waller Creek Center (625 East 10th Street in Austin). Copies of materials are available and are provided at the expense of the requestor.

In addition, a Public Involvement Committee (PIC) was established to advise the Utility and the project team. The PIC met eleven times over the course of several months to review a variety of key issues and allow time for debate, comment and questions about additional issues.

The PIC included representatives from all customer classes. Its meetings were open to all interested ratepayers and meeting times and agendas were listed on the project web page.

The PIC debated and provided a non-binding vote recommending how to handle individual issues. PIC members were responsible for both representing their customer classes and for seeking consensus on what is best for the community as a whole. Because consensus on all issues was not expected, all the comments and views put forward by PIC members and others attending meetings were taken into account regardless of majority-held positions.

Toward the end of the study, PIC members and others were asked to submit written comments on the recommended rate methodology that will be bound together with the Final Report to be submitted to the City Council. Anyone is welcome to submit written comments to the project team at any time. These comments should be addressed to Michael Castillo, Utility Financial Manager, Austin Water Utility, 625 E. 10th Street, Suite 500, Austin TX 78701.

The Utility also contracted with a residential Rate Advocate to provide outreach and technical assistance to residential customers as well as to represent their views on the Public Involvement Committee. The Rate Advocate conducted analyses of recommendations from the point of view of residential ratepayers. The Rate Advocate is Angela Taylor Rubottom of West View Financial.

As mentioned earlier setting rates is inherently controversial so it is unrealistic to expect all customers to support any given rate proposal. As with any project that involves sharing costs, all customer classes usually wish someone else could bear more of the rate burden. The Utility's goal is to enable all affected parties to have an effective voice in the process.