



ASSOCIATION OF WASHINGTON CITIES Utility Rate Setting Basics for Newly Elected Officials

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About FCS GROUP



**Utility Rate and
Fee Consulting**



**General Government
Financial Analysis**



**Utility
Management**



**Economic and Funding
Strategies**

4,000+
PROJECTS
COMPLETED

650+
PUBLIC CLIENTS
SERVED

35
MANAGEMENT AND
TECHNICAL PROFESSIONALS

36
YEARS IN OPERATION
EST. 1988

4
OFFICES IN WASHINGTON,
COLORADO, AND OREGON



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Getting Things Started



Please scan the QR link to the left to complete a short, interactive survey

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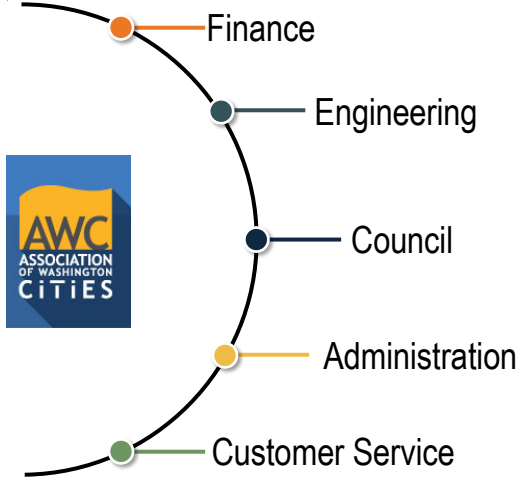
Agenda

- What is a rate study? Why do we do it? Why is it important?
- Components of a Rate Study:
 - » Financial Policies: Framework for success
 - » Revenue Requirement: Defining overall needs
 - » Cost of Service: Equity evaluation
 - » Rate Design: Collecting the target revenue
- Questions / Discussion

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A Successful Rate Study Is...

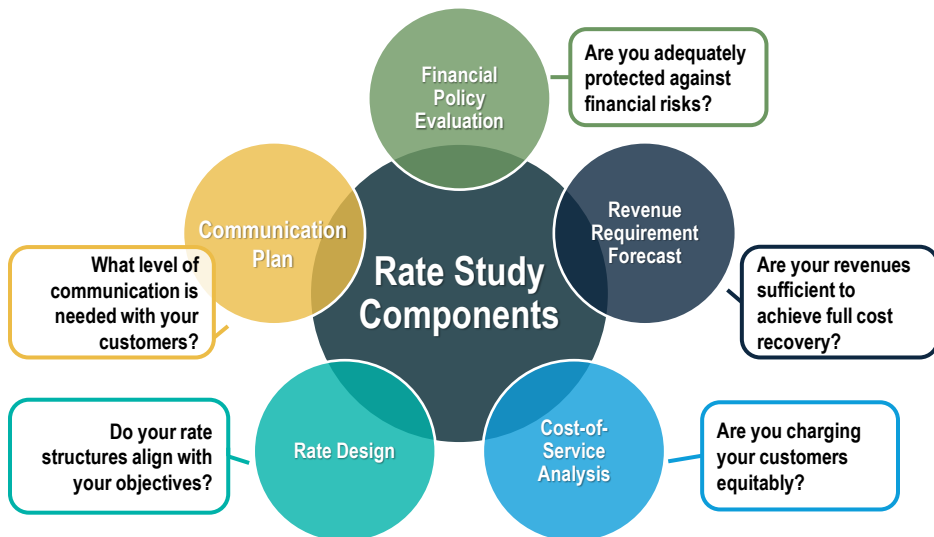


Not simply just a financial exercise

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Why are Rate Studies Important?



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Rate Study Purposes



Maintain the long-term health and integrity of utility systems



Quantify policies, priorities, and initiatives



Tell the “true” cost of providing service



Track cost information



Evaluate equity between customer groups



Communicate financial decisions and their impact



Management tool

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Understanding Sensitivities and Priorities

- Understanding priority of management sets the stage for your rate study
- Policies, strategies and rate structures can be developed or refined to align with priorities



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Financial Policies

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Are you Adequately Mitigating Risks?

- Financial policies serve to:
 - » Promote financial stability
 - » Improve ability to weather financial disruptions
 - » Establish foundation for consistent financial / rate decisions
 - » Help stabilize rates over time

Formally adopted
documented financial
policies are ideal!



Role of Financial Policies

Performance & Budgeting

How well are we financially performing compared to our standards and goals?

Contingency Planning

Are we financially prepared to respond to disruptions (e.g., natural disaster, economic downturn, equipment failure)?

Decision Framework

Do our financial and rate decisions align with our strategic goals, public priorities, and utility obligations?

Communication Tool

Do our financial policies provide documentation of our management philosophy to customers and stakeholders?

Documentation of Policies is Ideal!



Choosing your Financial Policies

	Purpose	Target
Operating Reserve	Liquidity cushion to accommodate cyclical cash flow fluctuations	Water = 90; Sewer = 45-90 Storm/Solid Waste = 30 Days O&M
Capital Contingency Reserve	To meet emergency repairs, unanticipated capital, and project cost overruns	1% - 2% of Original Cost Asset Values
Capital Replacement Funding	Annual contribution from rate revenue toward the accumulating replacement liability - utility infrastructure	Annual Depreciation Expense; Replacement Cost Depreciation
Equipment Reserve Funding	To fund ongoing vehicle and equipment replacement	Based on estimated replacement value
Debt Service Coverage	Compliance with existing debt covenants and maintain credit worthiness for future debt needs.	Target 2.0 or higher; Minimum Requirement 1.25
Rate Setting	Multi-year financial plan	2-6 years for rate-setting, 20-yr Comp plans
Revenue Sufficiency	Set rates to meet the total annual financial obligations of the utility and be self supporting	Rates shall be set to cover O&M, debt service, replacement reserves and fiscal policy achievement



Revenue Requirement

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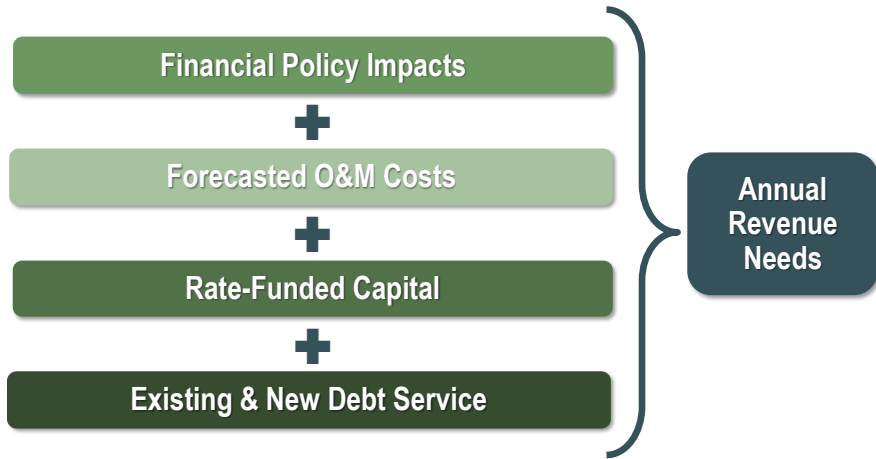
Overview of Revenue Requirement

- Determines the amount of annual revenue necessary to meet all utility financial obligations
- Evaluates sufficiency of current rates on a standalone basis
- Develops annual rate adjustment strategy
 - » Multi-year financial plan
- Establish revenue requirement objective
 - » Full cost recovery?
 - » Phase-in rate adjustments over time?
 - » Subsidy from General Fund?

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How Much Revenue is Needed?



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Two Key Cost Areas

Operations & Maintenance	Capital Infrastructure
<ul style="list-style-type: none">• Regular, ongoing activities• Highly time/schedule sensitive• More predictable spending patterns• More predictable funding sources	<ul style="list-style-type: none">• Large, discrete projects• Limited time/schedule sensitivity• Less predictable spending patterns• Less predictable funding sources

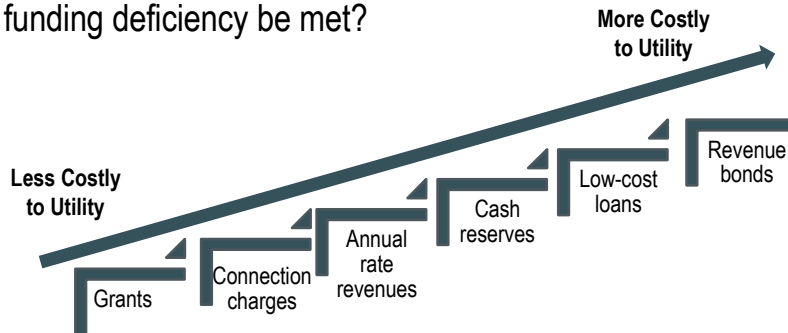
Separating operating and capital activities facilitates more accurate forecasting

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Capital Funding Considerations

- Understanding nature of capital projects can determine if funding should be cash, debt or a combination
 - » Debt financing spreads costs between existing and future ratepayers
 - » Existing customers should pay for assets currently in use - appropriate to rate (cash) fund
- How will funding deficiency be met?



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Capital Funding Philosophy

Cash (pay-as-you-go)

- Higher near-term rates
- Existing customers pay 100% of initial costs

Debt Financing

- Lowest near-term rates
- Mitigates immediate rate impacts of costly capital
- More closely matches costs to useful life of asset
- Spreads costs between existing and future ratepayers
- Debt capacity may be an issue

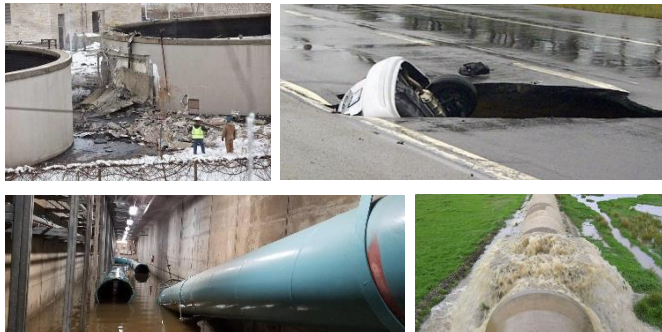
Hybrid

- Define a reasonable basis for cash/rate funding (R&R projects?)
- Evaluate need for debt (large, long-life projects)
- Aligns funding with nature of capital project

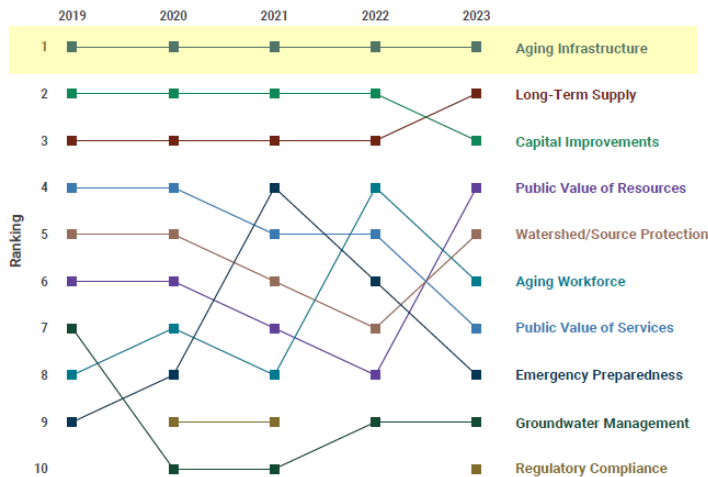
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Utility Asset Management

- Utilities must build, maintain, and replace infrastructure
- Long lived assets require long-term management
 - » Operational management: condition assessments & maintenance
 - » Financial management: saving money for repair and replacement



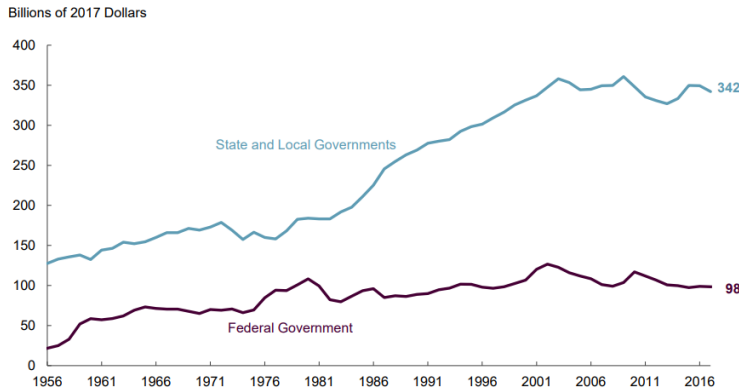
Top 10 Issues Facing the Water Sector, 2019–2023





Local Government Infrastructure Spending

Public Spending on Transportation and Water Infrastructure, by Level of Government, 1956 to 2017



State/local spending on water infrastructure is outpacing federal support



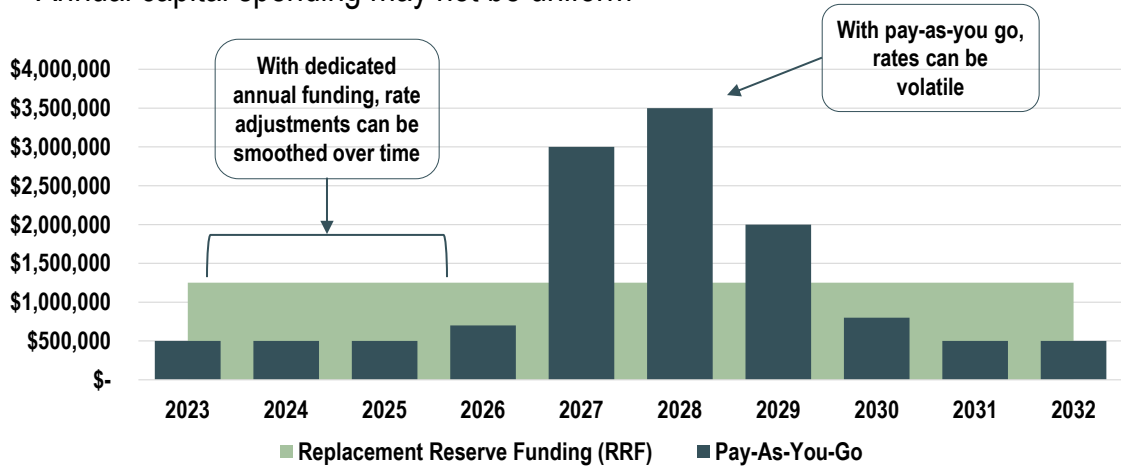
Replacement Funding – How Much?

- Is asset inventory available?
- Do you know original cost of assets?
 - » If answer is no, you can still move ahead!
- Gather staff resources and historical documents to begin the process of creating system value
 - » Critical information for understanding replacement funding needs and setting system connection charges



Replacement Reserve Funding (RRF)

- Annual capital spending may not be uniform

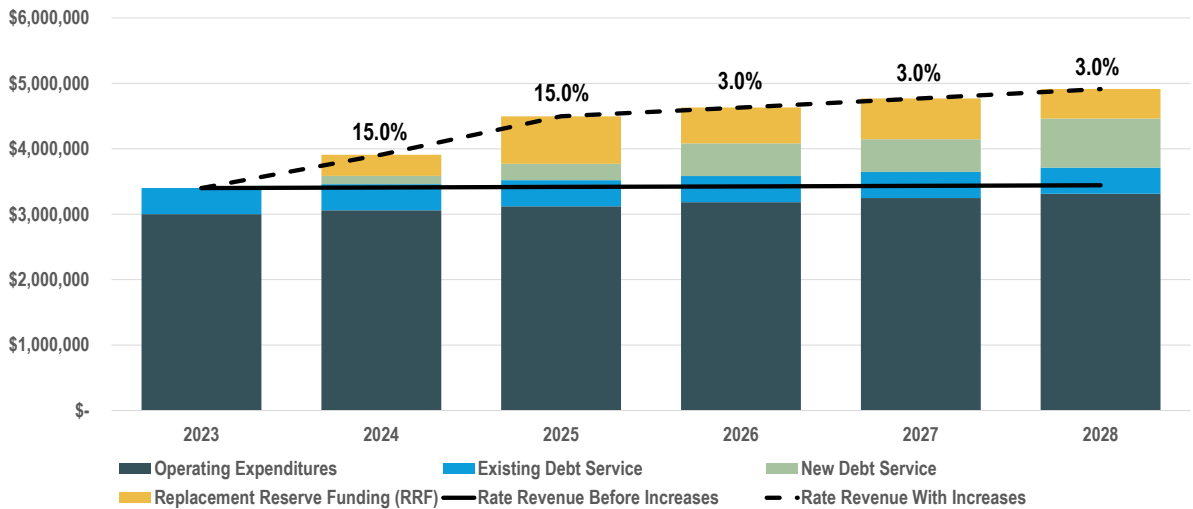


Revenue Considerations

Revenue Considerations	
Rate Revenue	<ul style="list-style-type: none"> • Review historical trends • Anticipate growth (but be conservative) • Annexation / service area expansion • New, large customer
Other Revenue	<ul style="list-style-type: none"> • Miscellaneous fees • One time or recurring • Increase w/ customer growth or flat
Cash Balance	<ul style="list-style-type: none"> • Not an on-going resource • Can mask revenue shortfalls



Summary of Rate Revenue Requirement



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Decision Point for Utility – Can We Stop Here?

- Yes, if:
 - » Uniform customer base (e.g., single-family residential)
 - » Satisfied with current class equity
 - » Current rate structure adequately meets goals
- Then:
 - » Simply apply indicated rate increases across the board to existing rate structure

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Cost of Service

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Cost of Service = Cost Equity Evaluation

- Policy objective: Equitable and rational distribution of cost to customer groups or classes. Distribution determined by:
 - » Industry standard methodologies
 - » Unique usage characteristics (use and demand)
 - » Unique facility requirements (planning and design criteria)
- Total cost by class (equity)
- Unit costs (\$/usage; \$/customer)
- Determines the cost difference to serve different customer classes of service

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Sample Customer Classes

Single Family Residential (SFR)

- Typically largest customer group
- Relatively low usage per unit
- High peak demand
- Lowest fire flow requirement

Multi-family Residential (MFR)

- Lower usage per dwelling unit
- Usually master metered
- Relatively constant use
- Fire flow requirement between SFR & commercial

Commercial/ Industrial

- Diversity in use per account
- Relatively constant use
- Highest fire flow requirement

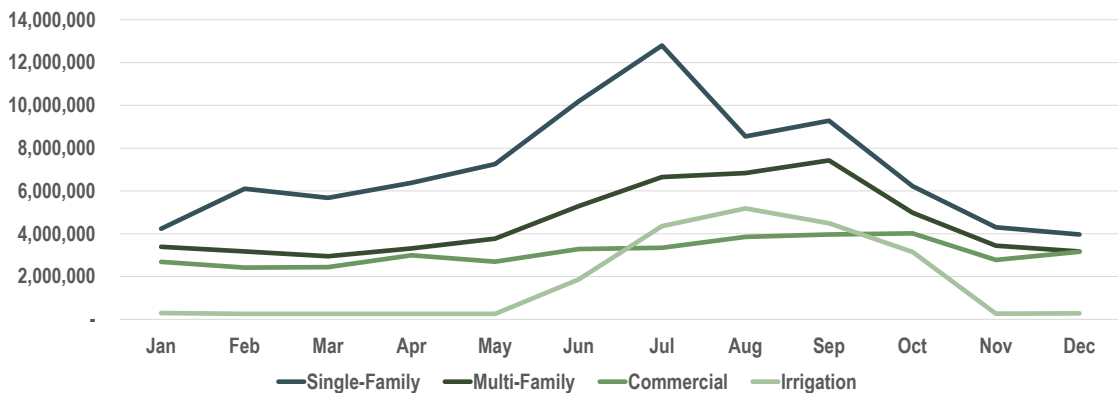
Parks, Irrigation, & Agriculture

- Often smallest customer classes in terms of accounts
- Majority of use in peak season
- No fire flow requirement
- Economic sensitivity

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Sample Customer Class Demand Profiles

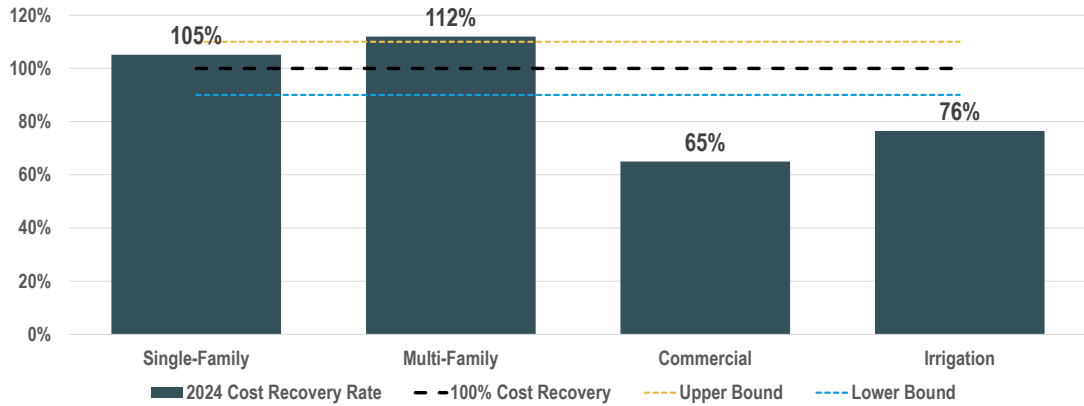


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Determining Your Customer Class Cost Shares

- Cost-of-service analysis identifies how costs should be equitably distributed among customer classes



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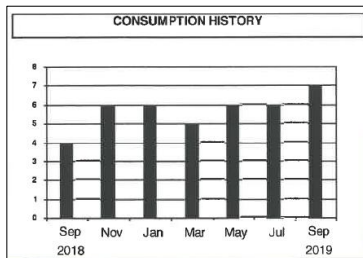
Rate Design

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Overview of Rate Design

- Policy Objective:
 - » Creation of rate structures that recover the target level of revenue
 - » Primary communication with customers
 - » Composed of fixed and/or variable charges
 - » Considers industry trends and current pricing goals

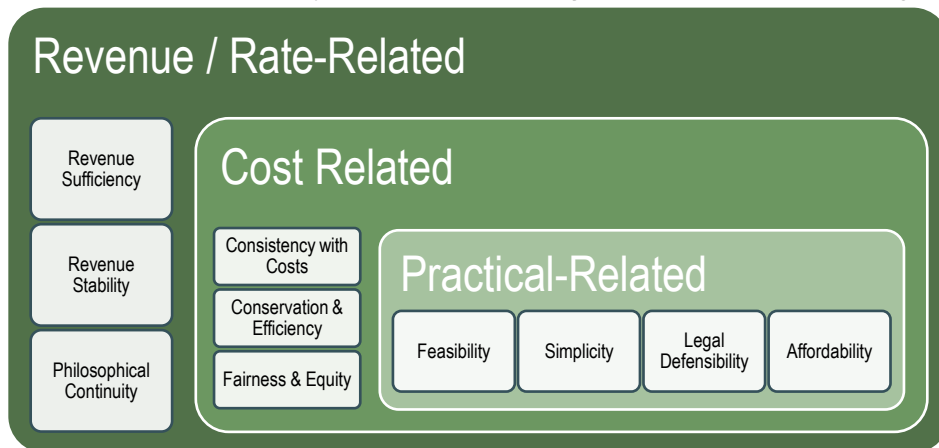


DESCRIPTION	AMOUNT
PREVIOUS BALANCE	59.95
PAYMENTS	-59.95
PAST DUE BALANCE	0.00
BASE CHARGE	55.85
CONSUMPTION	6.60
SUMMERSURCHARGE	1.60
TOTAL NEW CHARGE	64.05



Rate Setting Goals

- No structure can completely achieve all the objectives – it's a balancing act





Fixed and Volume Rate Recovery

Fixed Charges

Addresses revenue stability

- Imposed on each meter, account, or ERU
- Do not vary with the amount of use
- Provides a predictable source of revenue

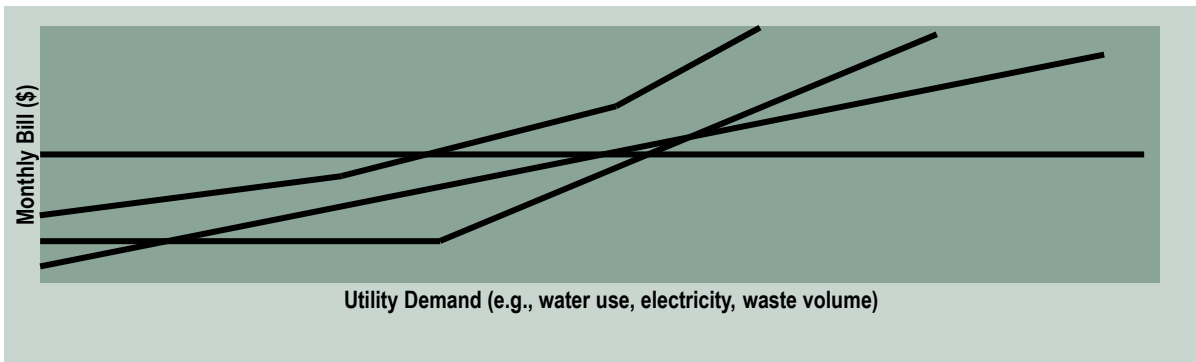
Volume Charges

Addresses equity & conservation

- Imposed on each unit (ccf or 1,000 gallons) of use/flow
- Recover a greater share of revenue from customers who place the greatest demand on the system
- Encourage conservation and efficiency in use
- Introduces additional revenue volatility and seasonality



Types of Rate Structures



Fixed monthly charge regardless of actual or estimated use. Common for sewer and stormwater residential rates

Flat Rate

Volume charge per unit of demand. Provides highest price signal to customers for conservation.

Variable Rate

Volume charge per unit of demand assessed after a pre-determined allowance amount. Used by some water and sewer utilities

Allowance Rate

Volume charge increases at established demand thresholds. Commonly used by water utilities

Inclining / Tiered Rate



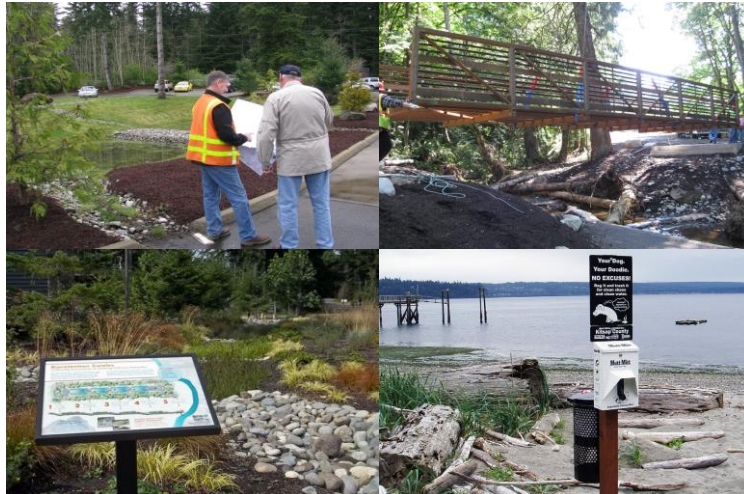
Parting Thoughts: A Tale of Two Utilities



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Parting Thoughts: A Tale of Two Utilities



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Thank you! Questions?

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