

Water and Sewer Rate Stabilization and Capital Plans

Delivering Results.

When the Water and Sewer Rate Stabilization and Capital Plans were adopted they created a platform for infrastructure investment to occur. Following years of deferred maintenance, the Rate Plans finally made critical utility improvements possible.

For 2 years Public Works has been making the possible happen and managing within the limits established by the Rate Plans. And after 2 years the success of the Rate Plans is evident.

This report demonstrates how the Rate Plans continue to deliver results.

Contents

| | | |
|------------------------|--|---------|
| Customer Focus | describes the value of the Rate Plans to the customer..... | Page 2 |
| Rate Impacts | translates the Rate increases into dollars and cents..... | Page 3 |
| Rate Analysis | explains the Rate cost structure..... | Page 5 |
| Rate Measures | compares city performance data with benchmarks..... | Page 7 |
| Capital Projects | lists the FY05 capital improvements | Page 17 |

Customer Focus of the Water and Sewer Rate Stabilization and Capital Plans

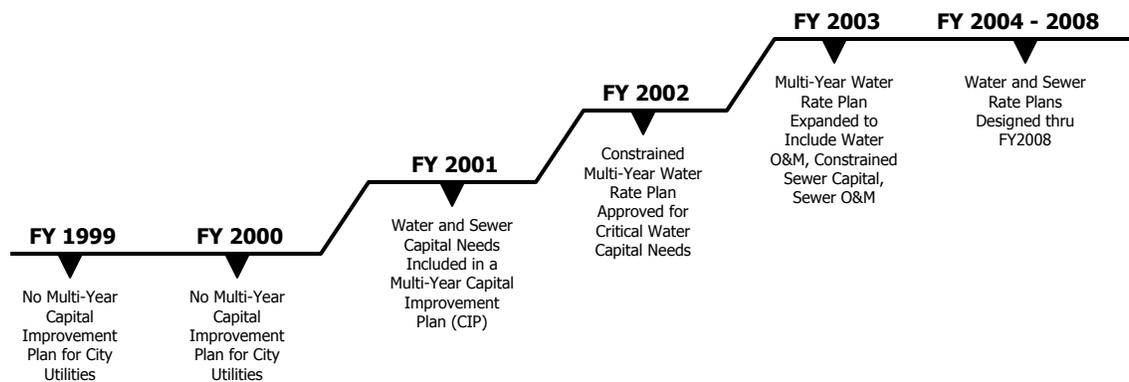


The Water and Sewer Fund's "Rate Stabilization Plans" were developed to meet the needs of the city's water and sewer customers that depend upon modern and reliable utility services for public health, economic development and quality of life priorities. The Rate Plans provide an infrastructure investment schedule that ensures infrastructure performance over the long term by using a strategy of planned, incremental upgrades with pre-determined spending caps set for each year (\$3 million in water, \$6 million in sewer) that limit the impact of rate increases in any given year. In this manner, the Rate Plans create financial parameters that require fiscal discipline to optimize constrained resources.

"The essence of strategy is choosing what to do and what not to do – the Rate Plans create a platform to make that happen."

As planning documents the Rate Plans provide the continuity needed to focus resources towards long term strategic objectives in a decision environment that is typically dominated by the short term pressures of the annual budget cycle. In contrast, the Rate Plans create a financial structure that is capable of integrating and aligning short, medium and long term priorities through multi-year resource allocations. This continuity does not mean that the Plans are rigid and non-adaptive. Rather, the Rate Plans provide a platform to understand the choices and consequences of change before making resource changes – which is what sound fiscal management and effective strategic planning is all about.

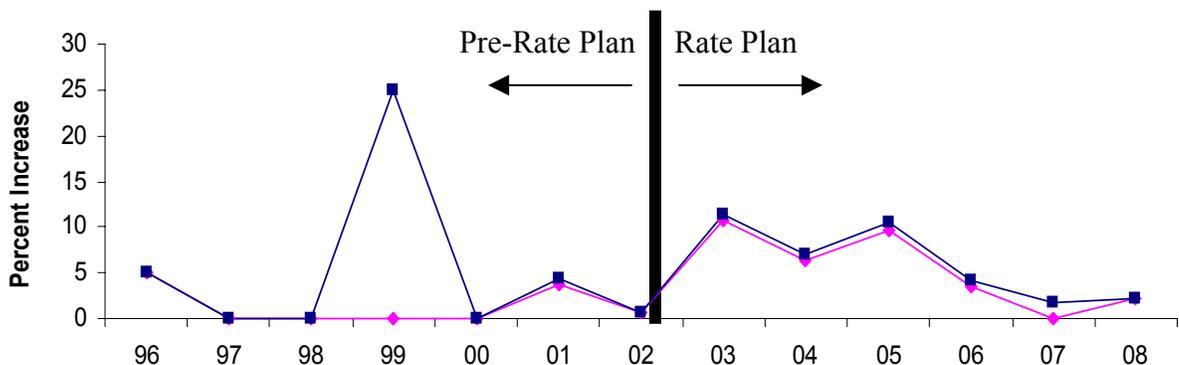
The Water and Sewer Rate Plans were products that evolved over a multi-year period:



The Rate Plans leverage debt recoveries, rate based cash and debt instruments in order to progressively build towards "pay as you go," cash-only positions – at which time rate increases will no longer be needed to support capital project outlays.

"Utility capital project financing is built into the City's water and sewer rate structures."

The Rate Plans offer a fiscally responsible approach to reconcile the gap between the mounting costs of critical infrastructure needs and the ability of the customer to pay. The Rate Plans provide a basis to prioritize and amortize the infrastructure needs across a multi-year time horizon that is price sensitive and more predictable for the customer. Ultimately, the Rate Plans enable Kingsport to stay on-pace with capital needs on behalf of the customer as a user of utility services – while keeping rates stable for the customer as a rate payer. (see chart below)



Rate Impacts of the Water and Sewer Rate Stabilization and Capital Plans



The proposed FY05 Water and Wastewater Services (Sewer) budgets – for both O&M and capital – are consistent with the numbers provided in the rate plans approved for both funds in FY04. The proposed FY05 utility fund budgets include the rate increases approved in the FY04 rate plans as follows:

"For under \$1.50 a day City residents use City water and sewer services."

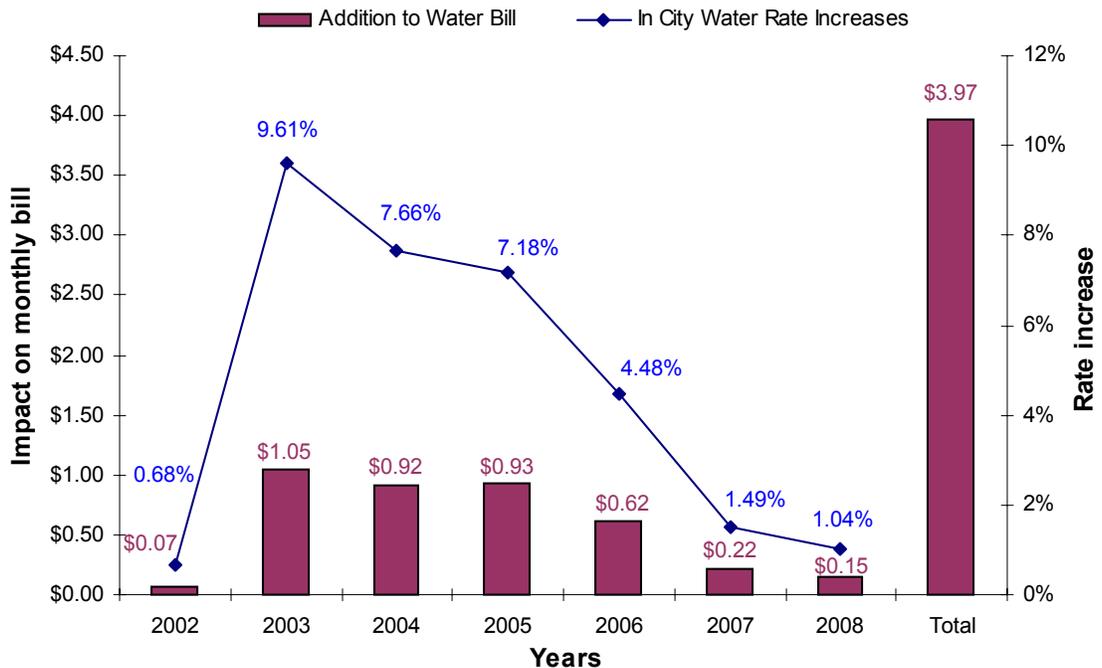
| Rates Approved in FY04 Plans for FY05 | | | | |
|--|---------|-------------------------------|--|----------------------------|
| | | FY05 Rate Increase Percent | Average 05 Cost Increase ⁽²⁾ | Average 05 Monthly Bill |
| Water | Inside | 7.18% | \$.93 / month | \$ 13.87 |
| | Outside | 7.95% | \$ 2.61 / month | \$ 35.39 |
| Wastewater | Inside | 5.50% | \$ 1.52 / month | \$ 29.07 |
| | Outside | 5.50% (1) | \$1.77 / month | \$ 33.97 |

(1) the FY04 rate plan proposed an increase of 5.53% but this amount was reduced to 5.50% due to the bond reallocation that occurred during FY04.

(2) the household cost impact is based upon an average residential water usage of 5,000 gallons/month

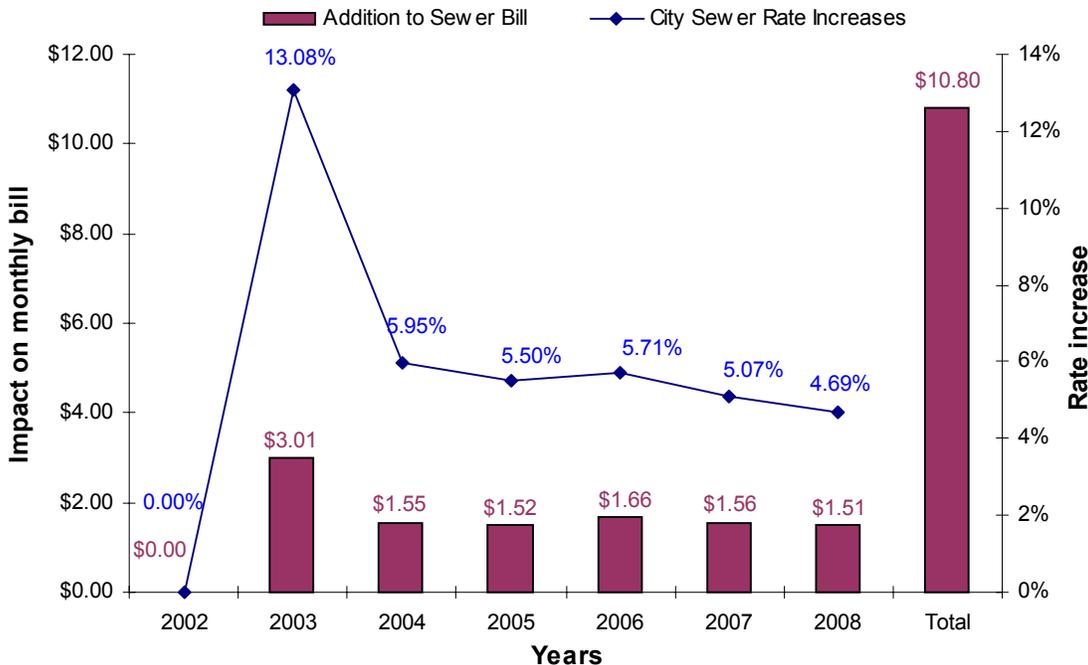
At the end of the 7 year term of the Water Rate Plan, the rate increases currently programmed in the Water Rate Plan will have increased the average City water customer monthly water bill (calculated at 5,000 gallons/month) a total of \$3.97/month or \$47.64/year. At that rate -- for under .15 cents/day (\$47.64/365 days/year) City water customers' return on investment will be \$20 million in critical water system upgrades.

In-City Water Rate Projections and Monthly Water Bill Impacts



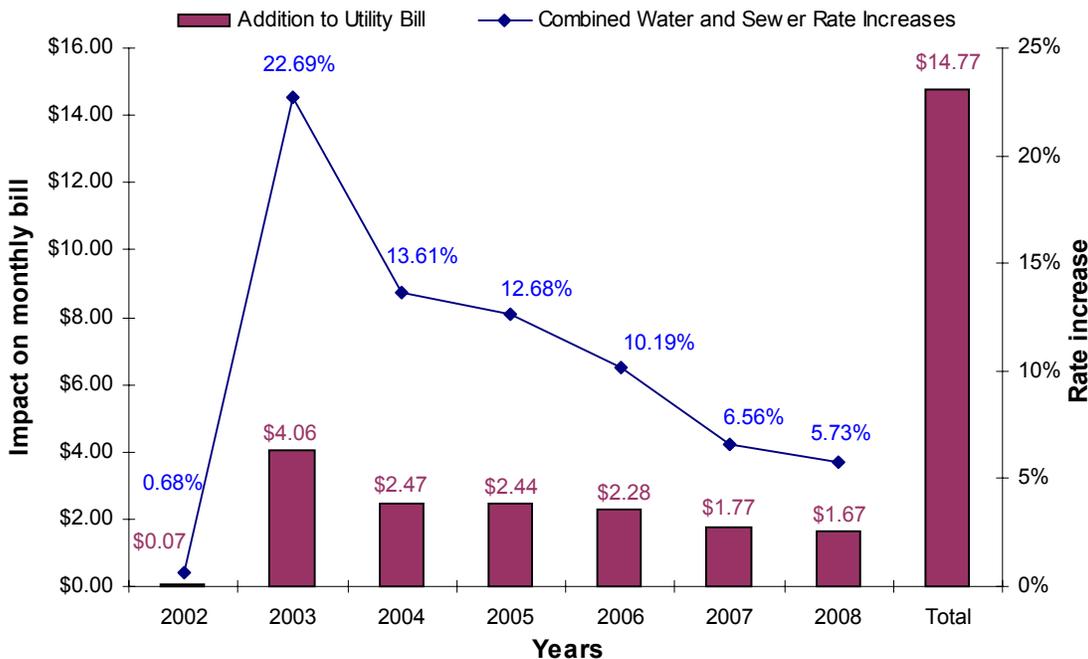
At the end of the 7 year term of the Sewer Rate Plan, the rate increases currently programmed in the Sewer Rate Plan will have increased the average City sewer customer monthly bill (calculated at 5,000 gallons/month) a total of \$10.80/month or \$129.60/year. At that rate -- for under .36 cents/day (\$129.60/365 days/year) City sewer customers return on investment will be \$42 million in critical sewer system upgrades.

In-City Sewer Rate Projections and Monthly Sewer Bill Impacts



At the end of the 7 year term of the Utility Rate Plan, the rate increases currently programmed in the Water and Sewer Rate Plans will have increased the average City customer monthly utility bill (calculated at 5,000 gallons/month) a total of \$14.77/month or \$177.24/year. At that rate -- for under .50 cents/day (\$177.24/365 days/year) City utility customers return on investment will be \$62 million in critical water and sewer system upgrades.

In-City Water and Sewer Rate Projections and Monthly Bill Impacts



Rate Analysis *of the Water and Sewer Rate Stabilization and Capital Plans*



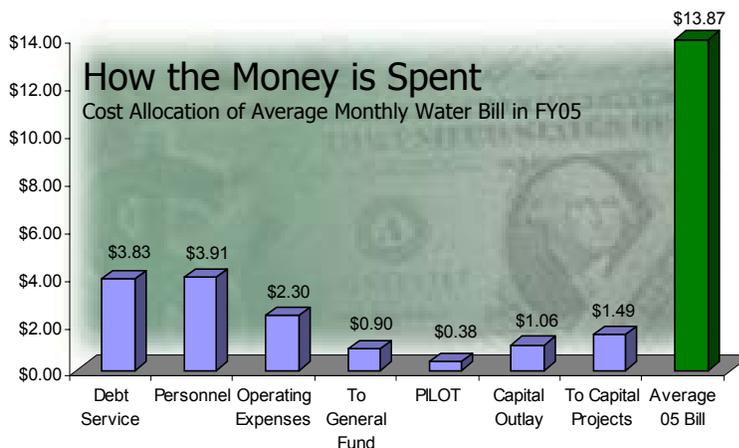
The Rate Plans build on the baseline water and sewer rates that existed in FY01 and provide controlled rate increases on a 7 year schedule that will ensure the financial integrity of the funds and bring the Water and Sewer Funds into compliance with the fiscal objectives established by the BMA.

Water Fund

The cost elements that are built into the rates paid by the water customers include:

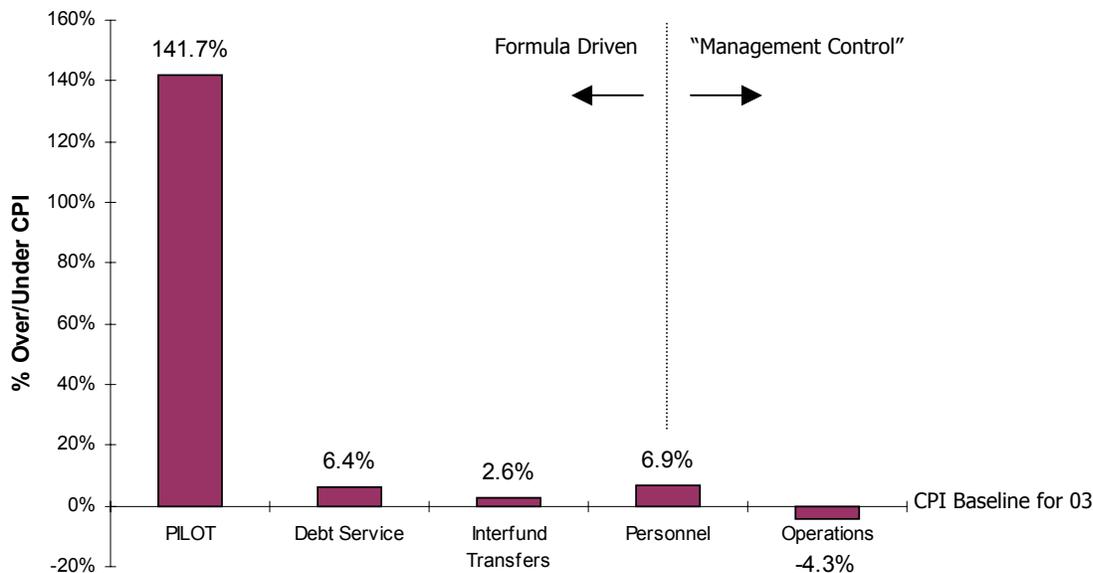
- Personnel – salaries and benefits for employees
- Capital Outlay – operations capital costs
- PILOT – “payment in lieu of taxes”
- Interfund Transfers – proportional contribution to General Fund
- Operations/Maintenance – materials, supplies, etc.
- Cash to Capital – new capital project funding
- Debt Financing – debt service payments

Where the Money Goes...



Of the Water Fund’s \$12,280,700 total budget only the Operations & Maintenance costs, which represent 11% or approximately \$1,350,000, are “discretionary” or non-formula driven. Personnel costs – at \$3,465,100 – are partially formula driven, e.g., retirement, health costs, etc. yet there are also some discretionary costs within personnel as well, e.g., overtime, head count, etc. In comparing the increases in costs from FY02 to FY03 for each of the Water Fund cost categories, Operations & Maintenance was the only category that came in under the CPI adjusted costs. The O&M cost reduction is an indicator of the aggressive cost containment practices deployed by the Water Division.

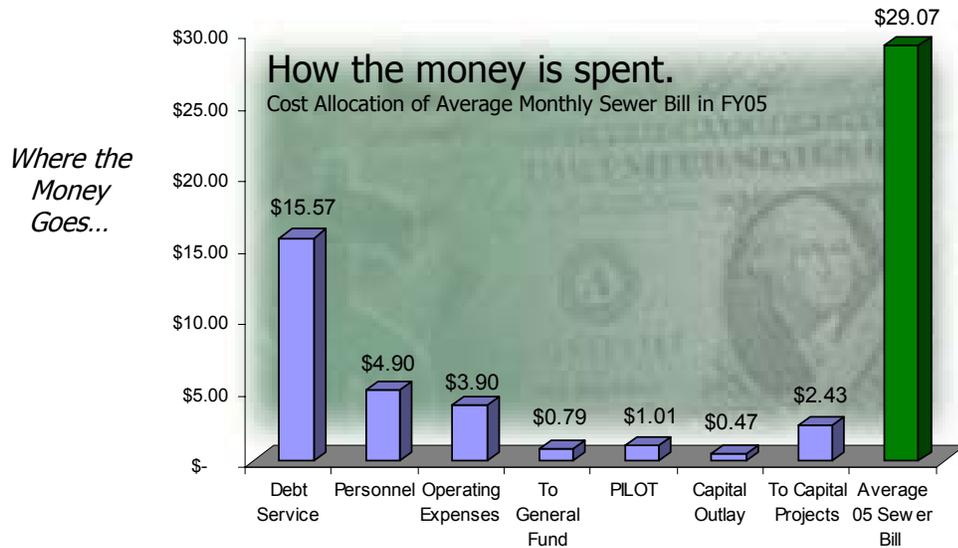
% Water Fund Cost Increases (FY02 to FY03) Over/Under CPI Growth



Sewer Fund

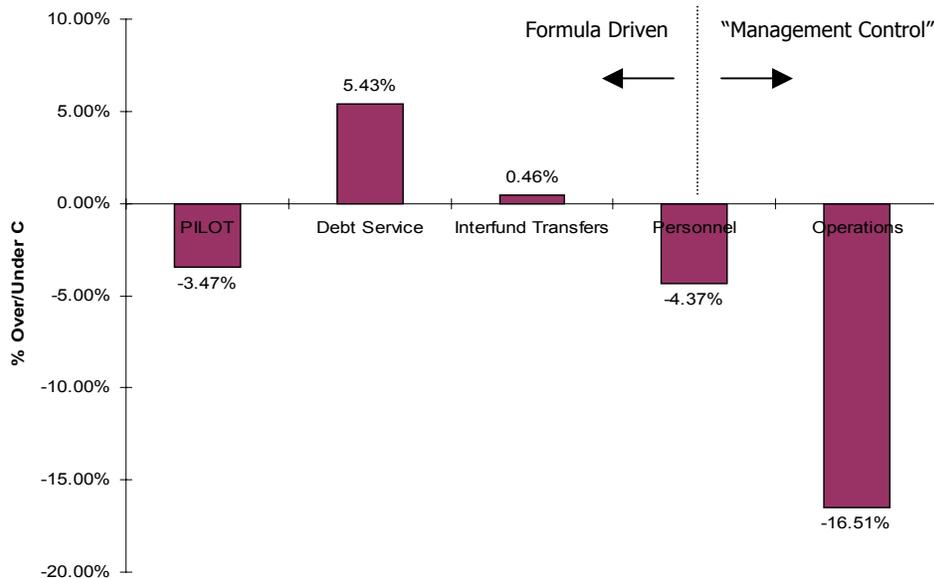
The cost elements that are built into the rates paid by the sewer customers include:

- Personnel – salaries and benefits for employees
- Capital Outlay – operations capital costs
- PILOT – “payment in lieu of taxes”
- Interfund Transfers – proportional contribution to General Fund
- Operations/Maintenance – materials, supplies, etc.
- Cash to Capital – new capital project funding
- Debt Financing – debt service payments



Of the Sewer Fund’s \$11,746,600 total budget only the Operations & Maintenance costs, 13% or approximately \$1,527,000, are “discretionary” or non-formula driven. Personnel costs – at \$1,981,600 – are partially formula driven, e.g., retirement, health costs, etc. yet there are also some discretionary costs within personnel as well, e.g., overtime, head count, etc. In comparing the increases in costs from FY02 to FY03 for each of the Sewer Fund cost categories, both of discretionary cost centers -- Operations & Maintenance and Personnel -- came in under the CPI adjusted costs. These cost reductions are an indicator of the continued aggressive cost containment practices being deployed in the Sewer Division.

% Sewer Fund Cost Increases (FY02 to FY03) Over/Under CIP Growth



Rate Measures of the Water and Sewer Rate Stabilization and Capital Plans



The Utility Divisions use internal, regional, national and best-in-class measures and benchmarks to evaluate utility operations and financial performance. In trying to answer the question – How well do we do what we do? -- the comparative lens of benchmarks affords insight into performance strengths and weaknesses as well as competitive advantages and strategic opportunities.

As a practice, benchmarking has proven to be challenging due to the lack of uniform reporting standards. In many cases data is not readily available and the data that is found can be inconsistent due to differences in budgeting and cost accounting techniques used by utilities. Furthermore, the performance of the infrastructure (especially wastewater) is heavily influenced by local topography, size of the service area, local housing density, industrial base, and other socio-economic demographics. These differences make one-to-one comparisons difficult.

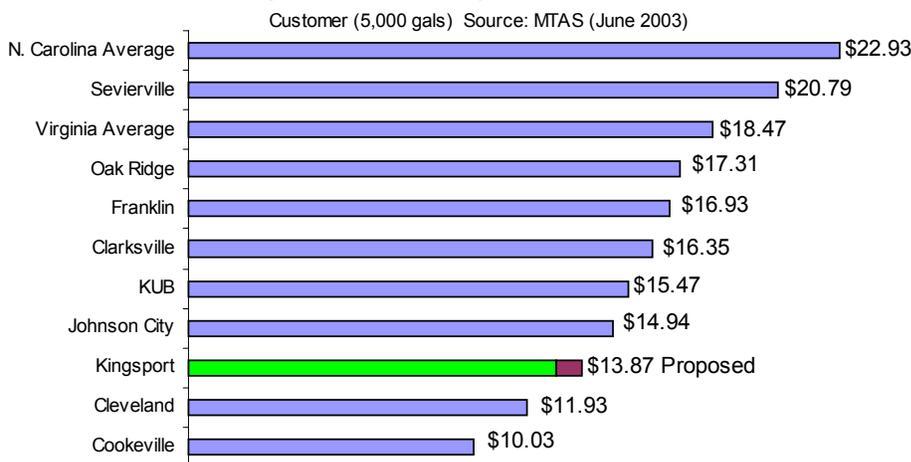
Despite these challenges, the comparative data provides critical information that is used to manage the utility operations. Each year the City improves its benchmark database and while it is not possible to control for every local variation, the data has proven invaluable in identifying industry performance standards, tracking trends, and setting stretch targets for City operations. In this performance scan, utility staff can better identify those areas where Kingsport utilities under and out-perform the market which in turn directs management attention and resources accordingly.

Water Benchmarks

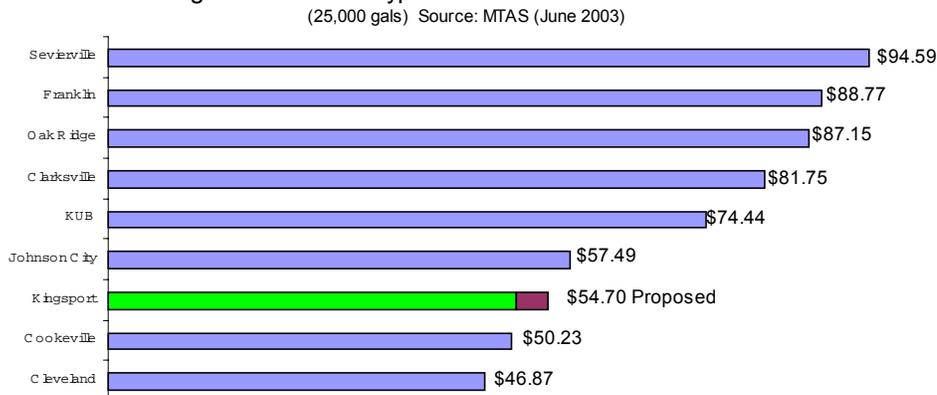
Customer Rates

Rate comparisons are difficult due to differences in fee structures, cash positions and funding strategies deployed by different utilities. However, a review of the water rates indicates that Kingsport has one of the most competitive water rates at both the local and regional level. Even with the proposed increase in FY05, Kingsport's water rates will still be 10% below the average water rate in Northeast Tennessee for residential and small industrial customers.

Average Water Bill for Typical Inside Residential



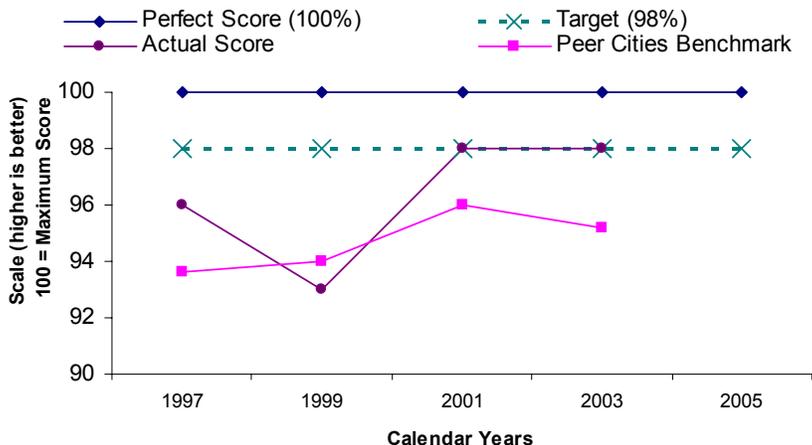
Average Water Bill for Typical Inside Small Industrial Customer



Measures of Excellence

The bi-annual state sanitary water survey provides a numerical score (1-100 scale, under 80 is unacceptable, 80 – 90 is “conditionally” approved, above 90 is approved) that rates all of the water utilities in the state on the quality of their planning, administration, and management practices used for their water system. The state sets the minimum score at 80 but the City’s water division has set 98 to 100 as their target range. Kingsport has achieved the target in the last 2 survey cycles.

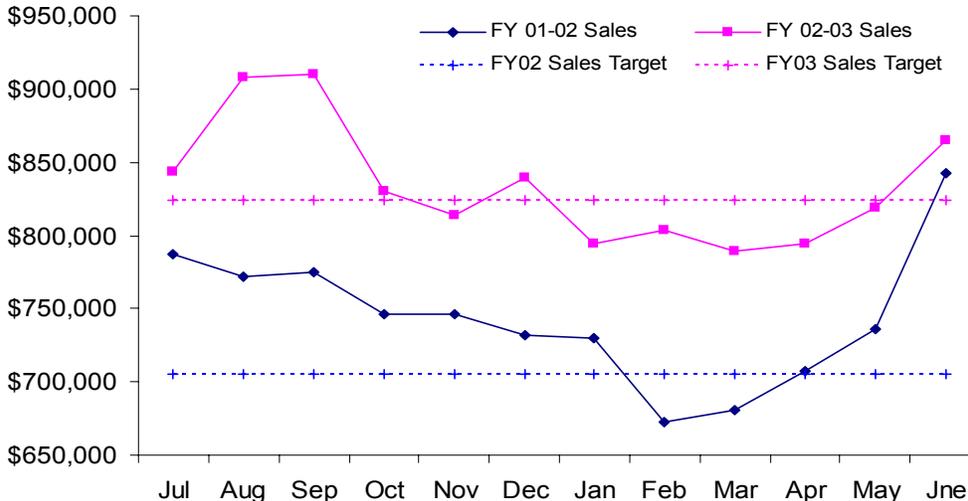
Bi-Annual Water Survey Results
Performance Excellence Measure



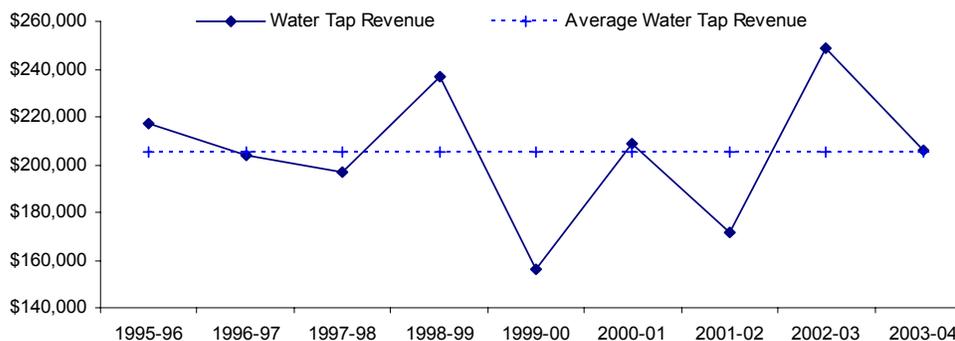
Financial Measures

The financial measures track transaction indicators to gauge bottom line performance-- including sales revenues, tap fee revenues, revenue productivity, utility debt load and water loss.

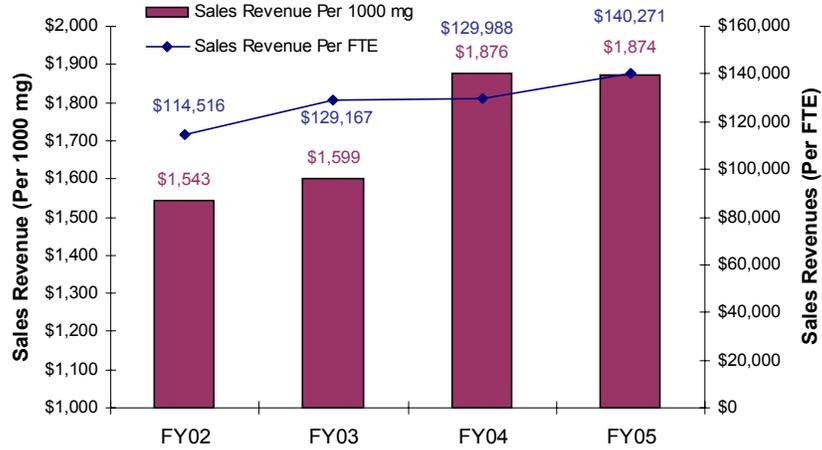
Water Sales Revenue FY02 and FY03



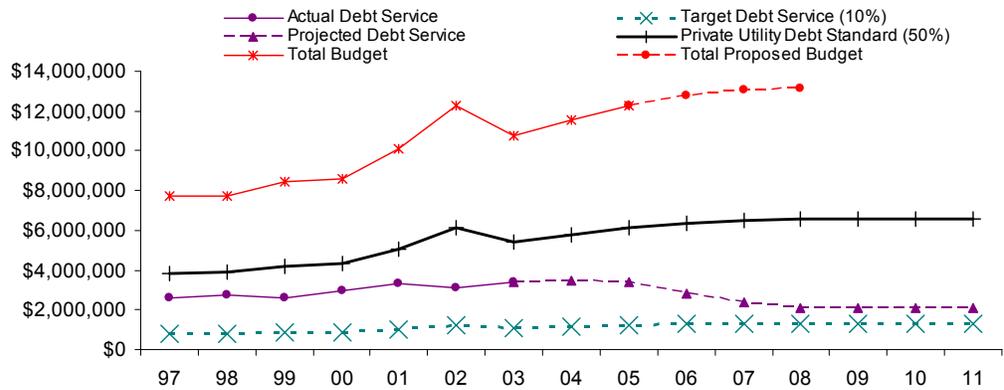
Water Tap Fee Revenue History



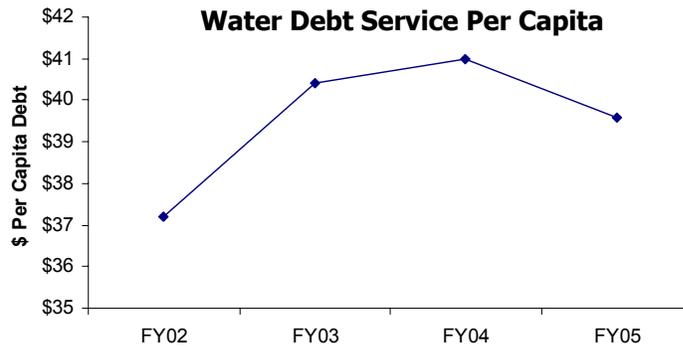
Water Sales Revenue Productivity Trends



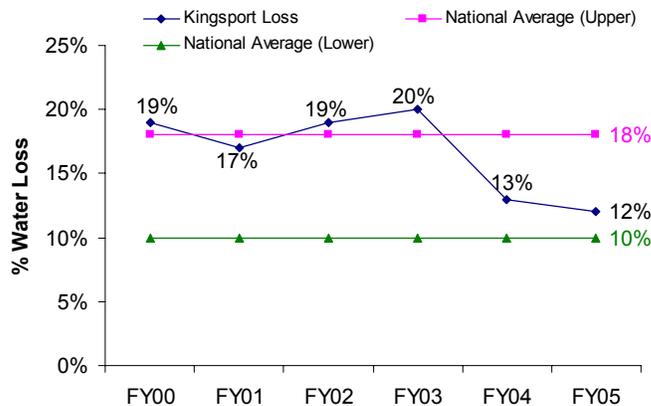
Water Fund Debt Service Plan



Water Debt Service Per Capita



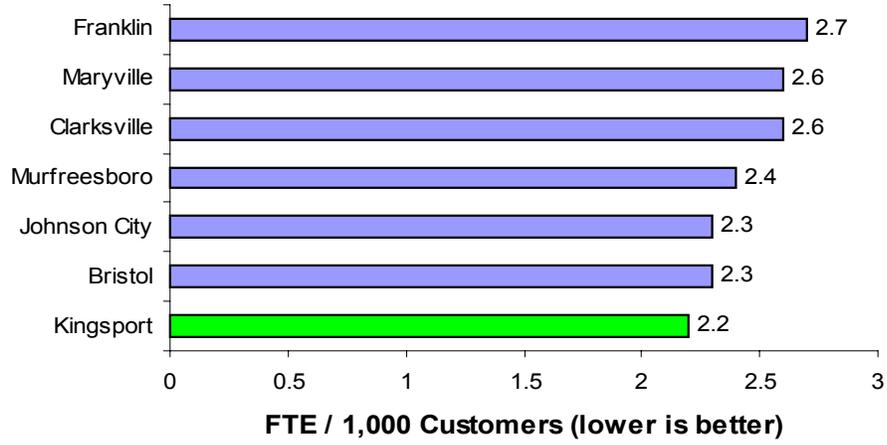
Unaccounted Water Loss Rates



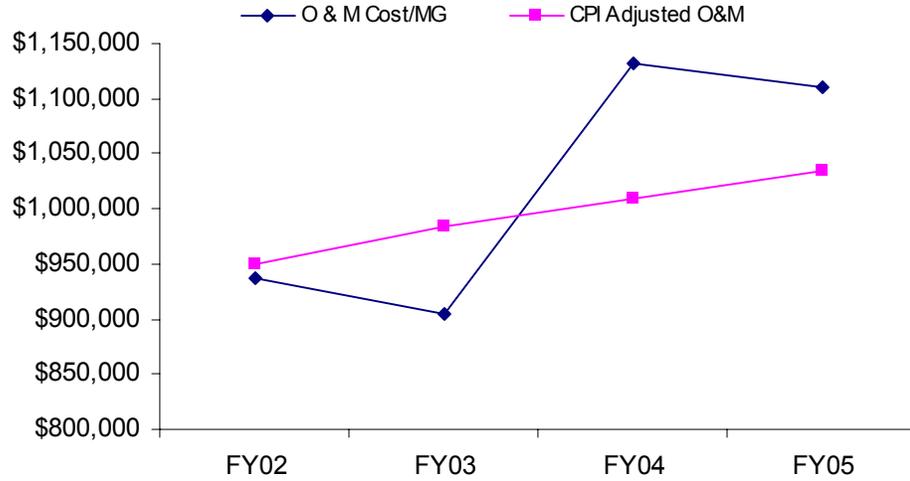
Operations Measures

The operations measures use staffing levels, production efficiencies, and outcome measures to evaluate operations performance.

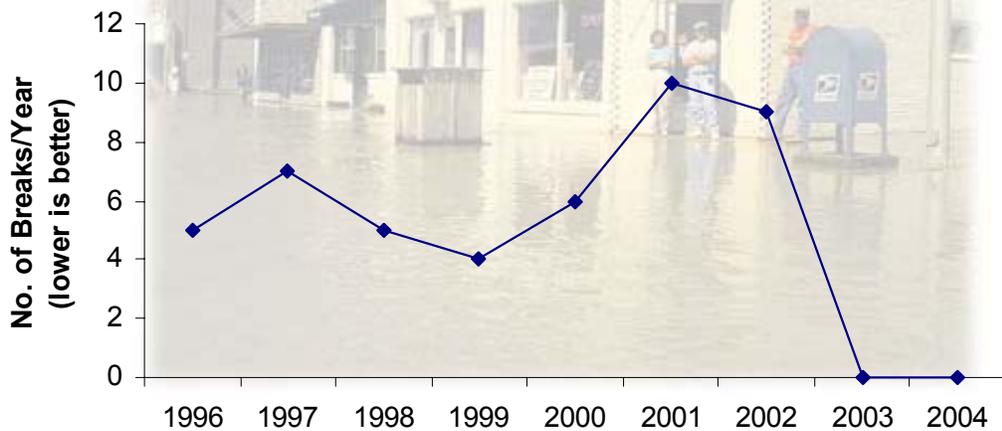
Water/Wastewater Staffing Benchmark



Water O & M Efficiency (Cost/MG)



Number of Transmission Line Breaks Per Year

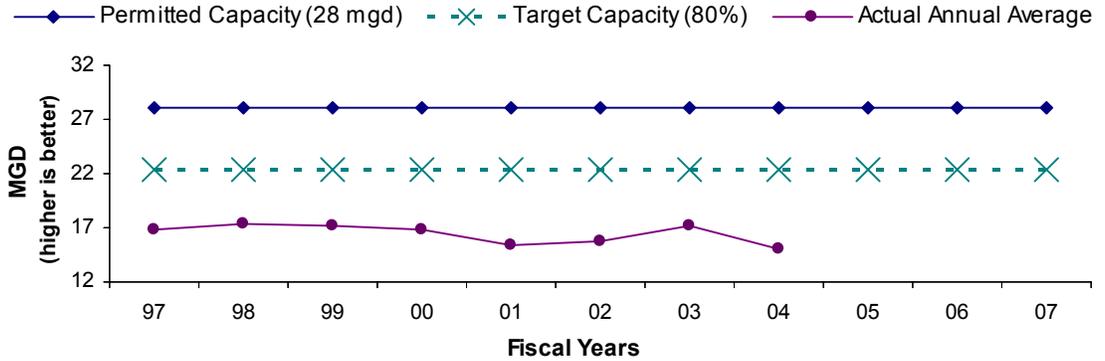


Growth Measures

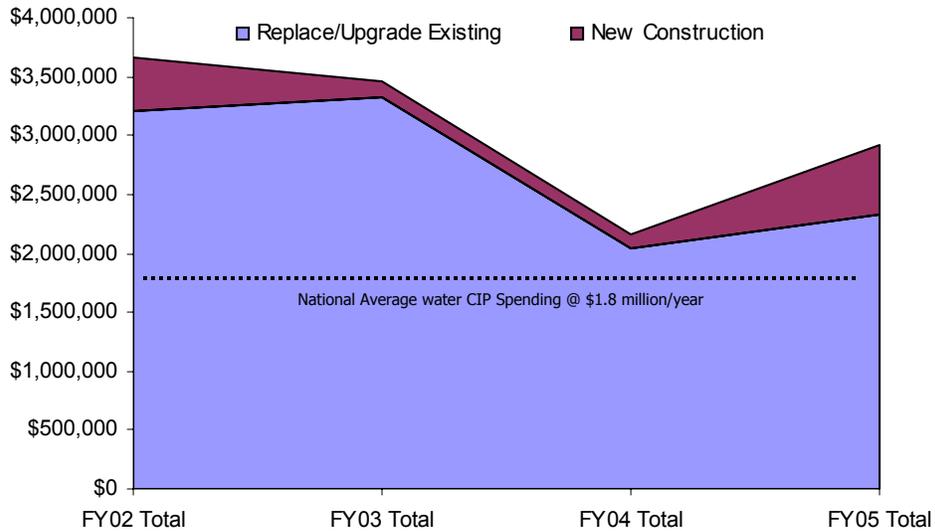
The growth measures provide leading indicators of future performance based on improvements in organizational capacity and capabilities.

Water Plant Capacity

Performance Excellence Measure



Dollar Value of Water Capital Investment / Year



Water Performance Scan Summary

Water Leadership Positions

Water System Survey Score
Rate Stabilization Plan
Low Staffing Levels

Competitive Position

Water Rates
Water Loss
Capital Investment
Production Capacity
Transmission Performance

Opportunities

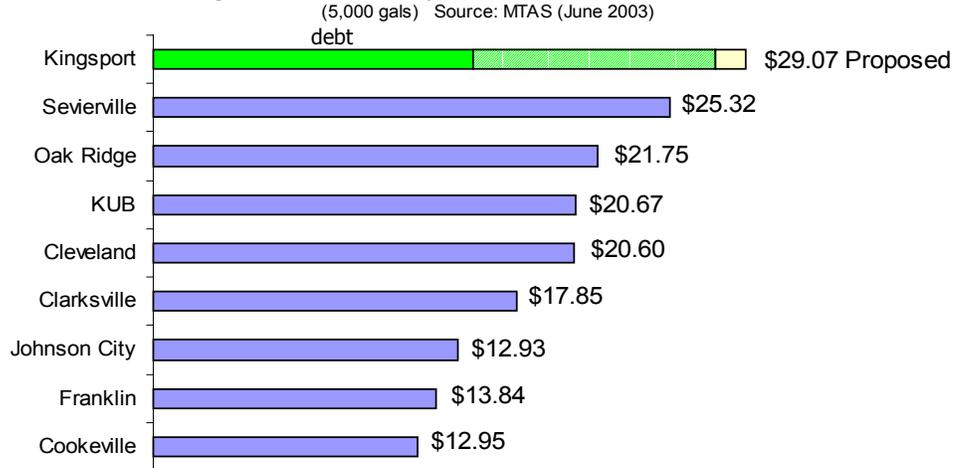
No Cash Reserve
Flat Sales Revenue

Sewer Benchmarks

Customer Rates

Rate comparisons are difficult due to differences in cash positions and funding strategies deployed by different utilities. However, a review of the sewer rates indicates that Kingsport has the highest sewer rates at both the local and regional level. Over half of Kingsport's sewer rate pays previous debt commitments.

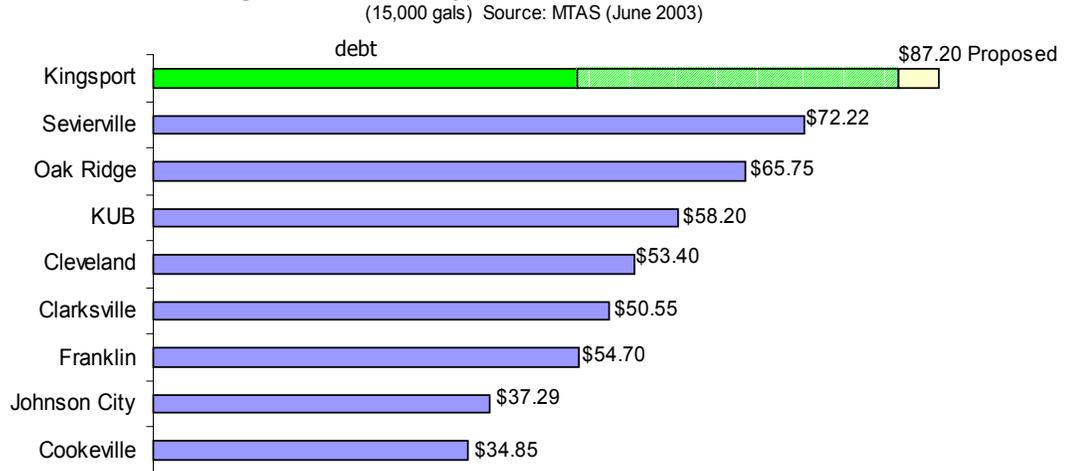
Average Sewer Bill for Typical Inside Residential Customer



With 54% of the City's proposed FY04 Sewer Rate dedicated to debt service on bond issues, the City's sewer rate is at a competitive disadvantage when compared with other cities' rates depending upon their corresponding level of capital burden.

This is validated in the charts below where Kingsport's non-debt related (O&M) costs compare favorably against peer cities.

Average Sewer Bill for Typical Inside Small Industrial Customer



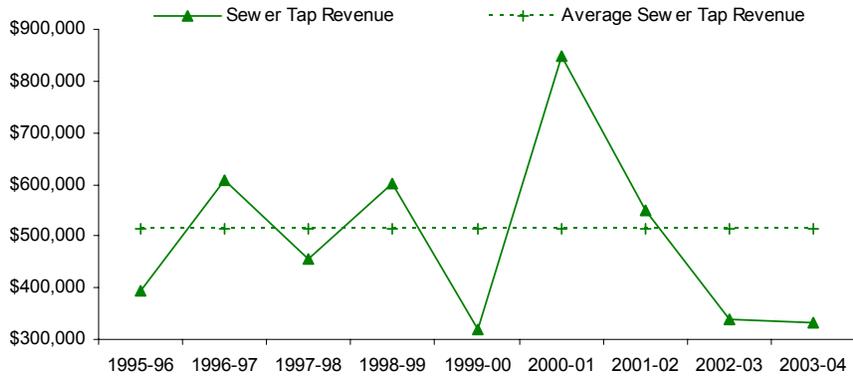
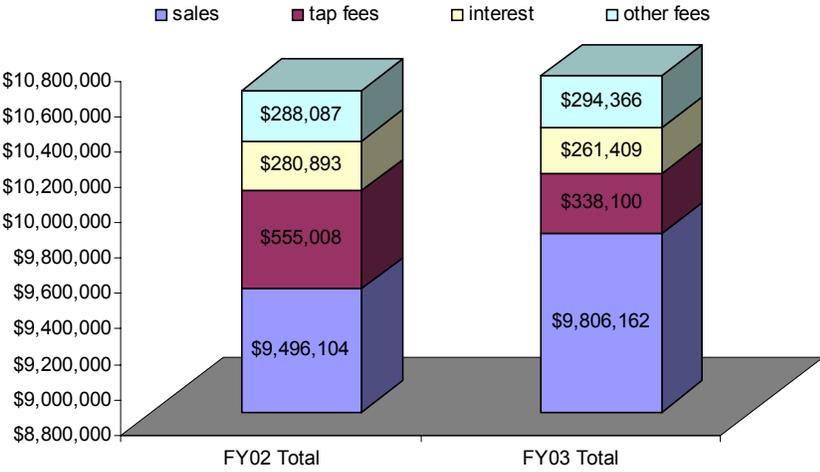
Measures of Excellence

The state of Tennessee does not perform wastewater service surveys and there are not any national accreditation programs so no outside Measures of Excellence were available for Sewer.

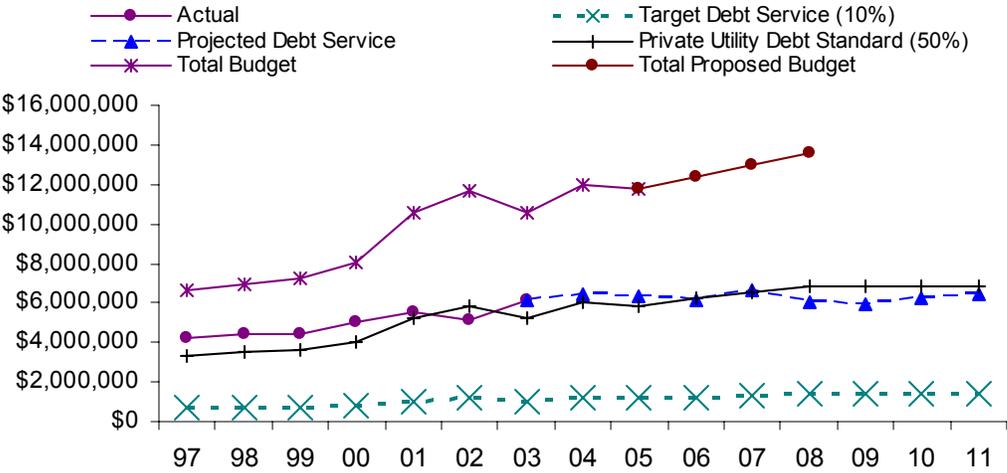
Financial Measures

The financial measures track transaction indicators to gauge bottom line performance-- including sales revenues, tap fee revenues, revenue productivity, and utility debt load.

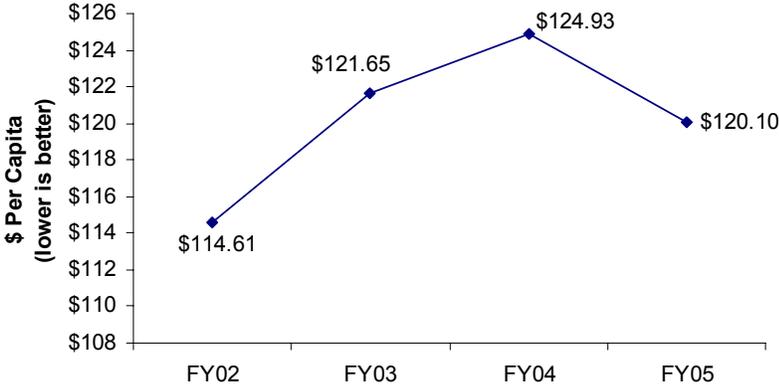
Sewer Revenue Trend FY02 – FY03



Wastewater Debt Service Plan



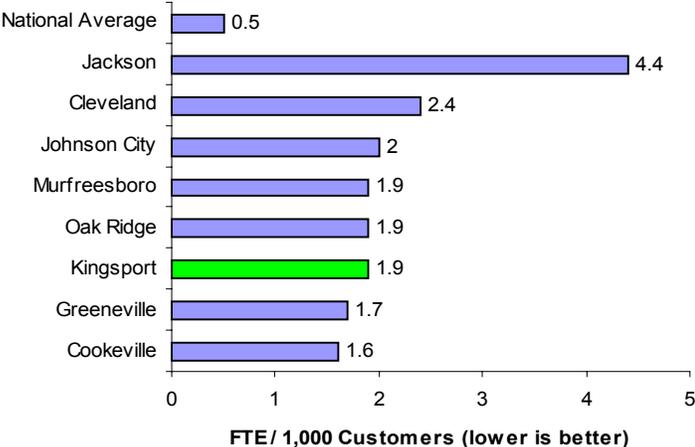
Sewer Debt Service Per Capita



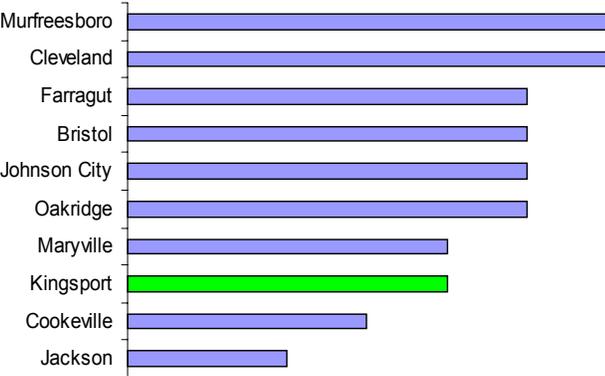
Operations Measures

The operations measures use staffing levels, production efficiencies, and outcome measures to evaluate operations performance.

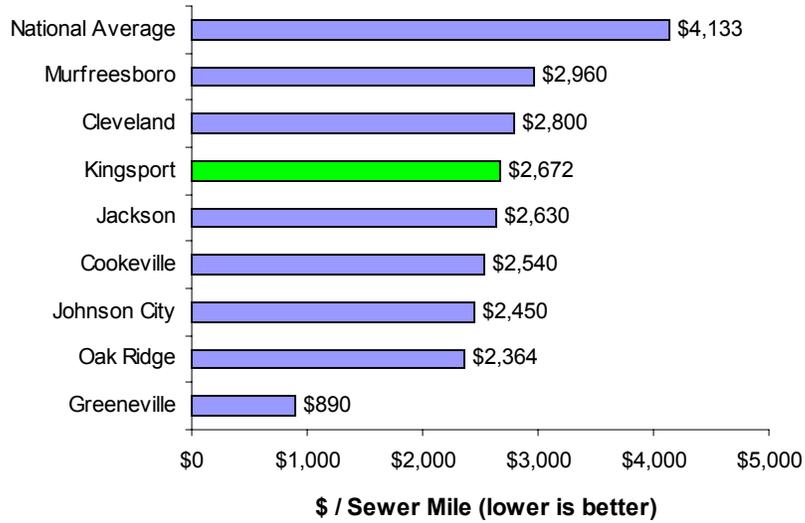
Wastewater Staff Benchmark (per 1000 Customers)



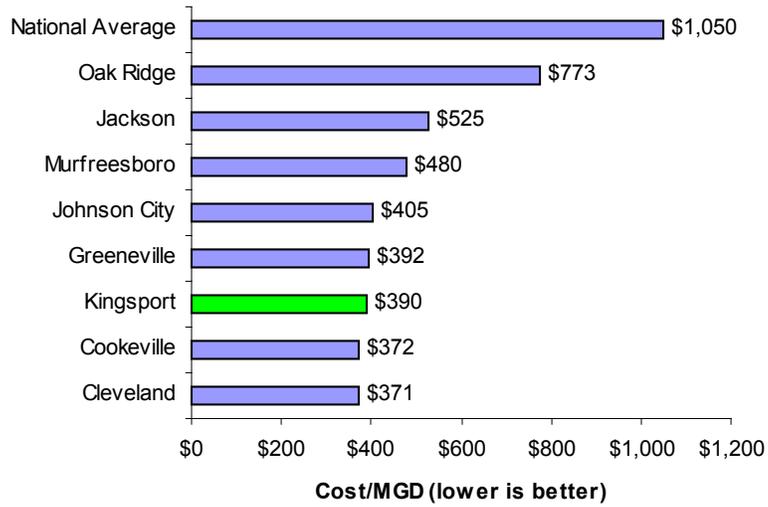
Number of Employees Per Sewer Mile



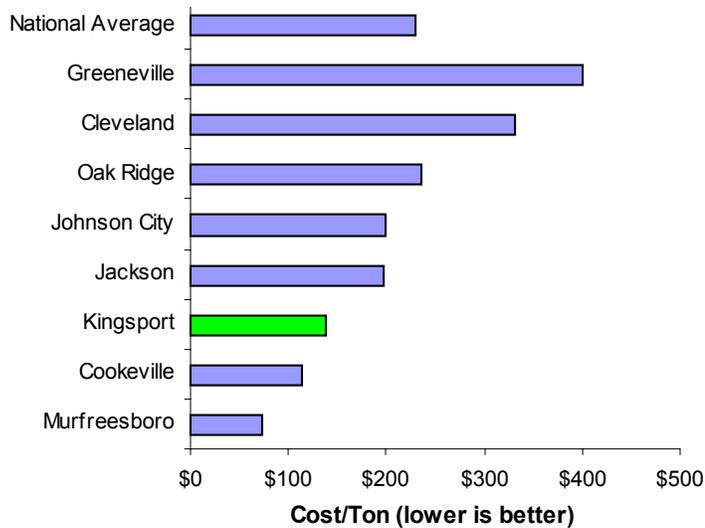
Collection System Costs (\$/Sewer Mile)



Wastewater Treatment Costs (\$/MG)



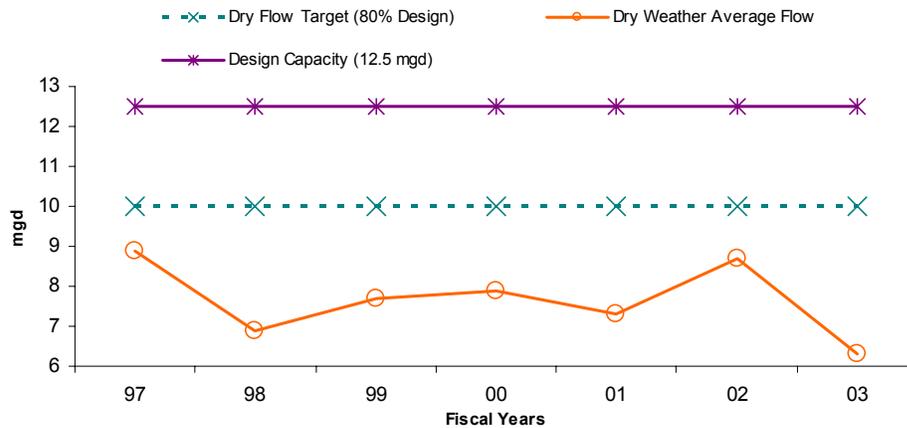
Wastewater Biosolids Costs Benchmark



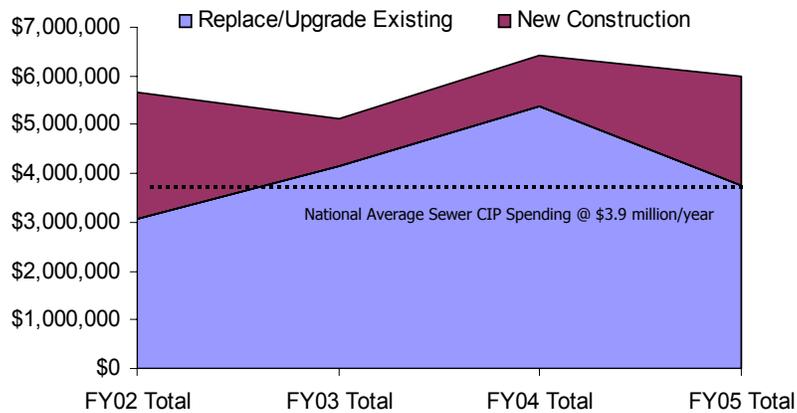
Growth Measures

The growth measures provide leading indicators of future performance based on improvements in organizational capacity and capabilities.

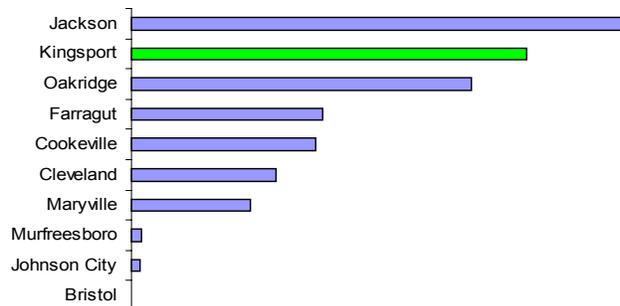
Wastewater Plant Capacity



Dollar Value of Sewer Capital Investment / Year



Reported Capital Wastewater Funding (FY03)



Wastewater Performance Scan Summary

Sewer Leadership Positions

Rate Stabilization Plan

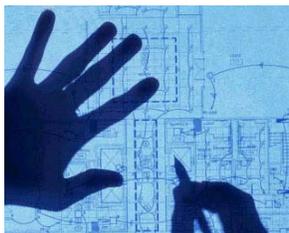
Competitive Position

Operating Costs
Capital Investment
Production Capacity

Opportunities

No Cash Reserve
Flat Sales Revenue
High Debt Load
High Rate

Capital Projects *of the Water and Sewer Rate Stabilization and Capital Plans*



Establishing a financial plan that was capable of sustaining funding for critical capital infrastructure needs was the principle motivation behind the development of the water and sewer Rate Plans. With over \$250 million invested in the current water and sewer infrastructure it was critical to develop an asset preservation program that ensured the long term economic performance of that asset. The Rate Plans accomplish that task.

Using the annual fiscal limits set by the BMA for each utility fund -- \$6 million/year in sewer, \$3 million/year in water -- the utility division staff have prioritized capital project work based on engineering assessments to fit within these limits. Even as unforeseen emergencies have developed mid-term in the Plan cycle, the Plan provides some cash liquidity that has enabled staff to respond to emergencies without seeking additional funding by working within the Plans.

The presence of a multi-year plan has also allowed staff to better leverage the capital funding through more effective project engineering, planning and construction scheduling that has yielded cost efficiencies from construction economies of scale and collaborative project work, e.g., install water and sewer lines concurrently. These project efficiencies have resulted in more work being accomplished at a lower cost -- in other words, doing more with less.

Water Capital Projects

The critical capital projects in planned for FY05 include:

89% of Water Capital in the Multi-Year Plan goes towards Repairing and Upgrading Existing Infrastructure

| | |
|--|------------------|
| City Waterline Upgrades - Phase 1 | \$ 903,000 |
| Indian Springs Waterline Upgrades -- Phase 1 | \$ 889,000 |
| Water Treatment Plant Upgrades | \$ 1,082,600 |
| <u>Westview Pump Station Upgrades</u> | <u>\$ 50,000</u> |

Total Capital Project Expenditures **\$ 2,924,600**

Sewer Capital Projects

The critical capital projects in planned for FY05 include:

70% of Sewer Capital in the Multi-Year Plan goes towards Repairing and Upgrading Existing Infrastructure

| | |
|---|---------------------|
| Inflow and Infiltration Abatement (state order) | \$ 2,395,000 |
| Wastewater Treatment Plant Upgrades | \$ 608,100 |
| Lift Station Repair / Replacement | \$ 750,000 |
| Sewer Line Replacements | \$ 0 |
| <u>Sewer Line Extensions</u> | <u>\$ 2,246,900</u> |

Total Capital Project Expenditures **\$ 6,000,000**