




City of Somerville, MA

Water & Sewer Rate Study FY2017-FY2021





Agenda

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- Rate Study Overview
 - Information Used in Evaluation
 - Approach and Evaluation Process
 - Findings of the Water & Sewer Rate Study
 - Recommendations





Rate Study Overview




Develop an accurate projection of the water and sewer costs of service, including:

- Operating Costs of running the utilities
- Existing Debt Service obligations from past investments
- Capital Costs of needed investments
- Probable changes in MWRA Assessments
- Recommend water and sewer rates sufficient to ensure the utilities' long term fiscal sustainability.
- Understand practical impact for customers



Goals of a Rate Study

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- Revenue Stability
 - Revenue Sufficiency
 - Equitable Distribution of Costs to Users
 - Maintenance of Adequate Reserves
 - Easy to Understand and Administer
 - Affordability of Critical Public Services



Approach & Process



- Review current and historical operating financials
- Review historical and project future billed consumption trends in Somerville
- Evaluate Community specific business considerations
- Develop defensible projection of future costs
 - Operational components
 - Capital components
- Evaluate different rate structures
- Project future performance of rate structures



Rate Setting Process

- Intensive review of the water & sewer financial records, billing records, and capital needs
 - Site Visits
 - Conversations and round table meetings with:
 - Acting Superintendent
 - Capital Projects Director
 - Finance Office
 - Auditors Office
 - City Treasurer
 - Understand the City's desired rate structure outcomes



Rate Setting Process

1. Establishment of a realistic projection of the costs that Somerville can expect over the coming five years:
 - Operational Costs & Existing Debt Service
 - Capital Program Costs
 - MWRA Costs
2. Evaluation of historical billing records
 - Ability to project the amount of water and sewer service which will be billed
 - Development of rates which yield durable revenue streams
3. Iterative meetings with work group on preferred combination of charges to fund the utilities.

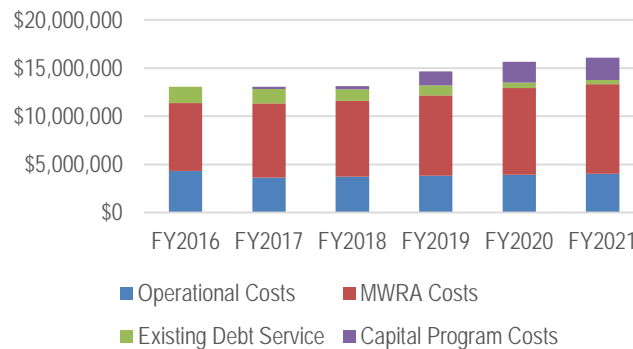


Projected Operating Budgets

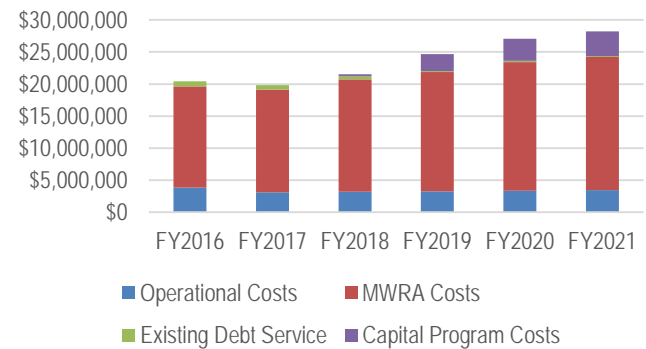
- Based upon current budget escalated using industry norms
- Water budgets are projected to increase from approximate \$13M in FY2017 to \$16M in FY2021
- Sewer budgets are projected to increase from approximately \$20M in FY2015 to \$28M in FY2021
- Modified funding/structuring of CIP can reduce the associated rate impact



Water Enterprise Fund - Revenue Requirement



Sewer Enterprise Fund - Revenue Requirement



Capital Improvement Plans

- Somerville is projected to have significant Capital Investments over the next coming 5-years (FY2017 though FY2021)
 - Water System: ~\$36M (unescalated cost estimate)
 - Sewer System: ~\$65M (unescalated cost estimate)
- Traditionally, many capital projects have been cash financed on a year-by-year basis
- Recommending a switch to debt financed capital investment to minimize rate impacts of needed investments.





Preliminary Findings

- Three primary objectives for the rate study:
 1. Generate sufficient revenues to cover the full cost of service of the utilities (including operating costs, existing debt service, and the cost of the CIP)
 2. Build sufficient reserves to cover unanticipated costs and prevent large year over year changes in rates
 3. Equitably generate needed revenue from the users receiving the system benefits.
- Preliminary Rate Recommendation
 1. Maintain existing three tier block rates
 2. Institute base charges rather than minimum charges
 3. Institute fire suppression charges
 4. Flat volumetric rates in water but annual adjustment to sewer volumetric rates for next 5 years.



Recommended Rates - Water

1. Recommend using current volumetric tiers sizes and relative tier volumetric costs.
2. Recommend institution of base monthly charges (level for 5 years).
3. Recommend institution of fire suppression charges to better recoup costs of investments from those customers receiving the most tangible benefit from the investment.
4. Recommended rates provide revenue streams adequate to fund operations and needed capital investments.

Tri-Annual Base Water Charge

Meter Size	Charge
5/8"	\$20
3/4"	\$20
1"	\$20
1-1/2"	\$40
2"	\$64
3"	\$120
4"	\$200
6+"	\$400

Recommended Volumetric Rates - Water (\$/unit)

Tier	Current	2017	2018	2019	2020	2021
1	\$4.14	\$4.14	\$4.14	\$4.14	\$4.14	\$4.14
2	\$5.97	\$5.97	\$5.97	\$5.97	\$5.97	\$5.97
3	\$6.26	\$6.26	\$6.26	\$6.26	\$6.26	\$6.26
4	\$6.50	\$6.50	\$6.50	\$6.50	\$6.50	\$6.50



Recommended Rates - Sewer

1. Recommend using current volumetric tiers sizes and relative tier volumetric costs.
2. Recommend institution of base monthly charges (level for 5 years).
3. Recommend annual 5% adjustment to volumetric rates through 2021.
4. Recommended rates provide revenue streams adequate to fund operations and needed capital investments.

Tri-Annual Base Sewer Charge

Meter Size	Charge
5/8"	\$40
3/4"	\$40
1"	\$40
1-1/2"	\$80
2"	\$128
3"	\$240
4"	\$400
6+"	\$800

Level Increase Rates - Sewer (\$/unit)

Tier	Current	2017	2018	2019	2020	2021
1	\$7.08	\$7.43	\$7.81	\$8.20	\$8.61	\$9.04
2	\$9.04	\$9.49	\$9.97	\$10.46	\$10.99	\$11.54
3	\$9.48	\$9.95	\$10.45	\$10.97	\$11.52	\$12.10
4	\$9.81	\$10.30	\$10.82	\$11.36	\$11.92	\$12.52





Base monthly charges

Rationale behind use of base monthly charges

There are many costs to the utilities which have no correlation to metered water and sewer usage.

Base charges are intended to partially cover these costs rather than spread out these costs over the customer base on a volumetric basis

Water Costs unrelated to usage

1. Purchase of meter
2. Meter Reading/AMR
3. Administration and Billing
4. Distribution system tests
5. Cost of UAW (~15% of MWRA Water Assessment)

Sewer Costs unrelated to usage

1. Purchase of meter
2. Meter Reading/AMR
3. Administration and Billing
4. Cost of Population portion of MWRA Assessment (~45% of MWRA Sewer Assessment)
5. Cost of stormwater related costs of MWRA Sewer Assessment





QUESTIONS?

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