

# **Water and Sewer Utility Rate Study**

## **Town of Newton, New Jersey**

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## Introduction and Scope

Laracy Associates LLC has been contracted by the Town of Newton to perform a rate study of the municipally owned Water and Sewer Utility. This report presents the results of the study conducted by a project team of Matt Laracy and Michael Rohal. Matt Laracy is municipal finance professional and holds licenses as a Certified Public Accountant, Certified Municipal Finance Officer, and Qualified Purchasing Agent. Michael Rohal has over 40 years of diverse experience as a Municipal Administrator and Municipal Engineer. Michael is a licensed Professional Engineer, Certified Public Works Manager, Professional Planner, Registered Municipal Clerk, and Qualified Purchasing Agent.

The Town of Newton is located in Sussex County, New Jersey and has a population of 8,374 according to the 2020 census. The Town operates a combined Water and Sewer Utility that provides water and wastewater services to the residents and businesses of the community. The utility is owned and operated by the local government and is responsible for providing clean and safe drinking water, managing and treating wastewater, and maintaining the water and sewer infrastructure owned by the municipality. The utility is funded by charges and fees paid by its customers, not by the municipal tax base, and is subject to regulations and oversight by both state and federal agencies.

The rate structure of the utility is based on the costs associated with providing these services, including capital expenditures for infrastructure upgrades and replacements, operating expenses such as energy and labor, and debt service for financing of infrastructure improvements. The rate structure must be designed to ensure that the utility is able to sustainably provide reliable water and wastewater services to meet the needs of the community while also ensuring financial stability and meeting regulatory requirements.

The purpose of the rate study is to assess the current rates set by the Town and provide recommendations for a fair and equitable rate structure that balances the needs of the utility and its customers. The study will consider factors such as infrastructure costs, capital investments, operating expenses, and future projections to ensure that the utility can continue to provide high-quality services and meet the growing needs of the community.

The Town of Newton was exceptionally responsive to data requests throughout the study. The majority of the data has been derived from the Town audits, budget documents, and internal financials. Various projections and estimates have been made during the course of this study and will be noted within the report.

## Current Operations

There are currently 2,775 water customers compared to 2,520 sewer customers. The municipality bills its customers on a quarterly basis. Water and sewer charges are calculated separately based on usage, but billed together. For purposes of this study, we have divided the customers into the following categories:

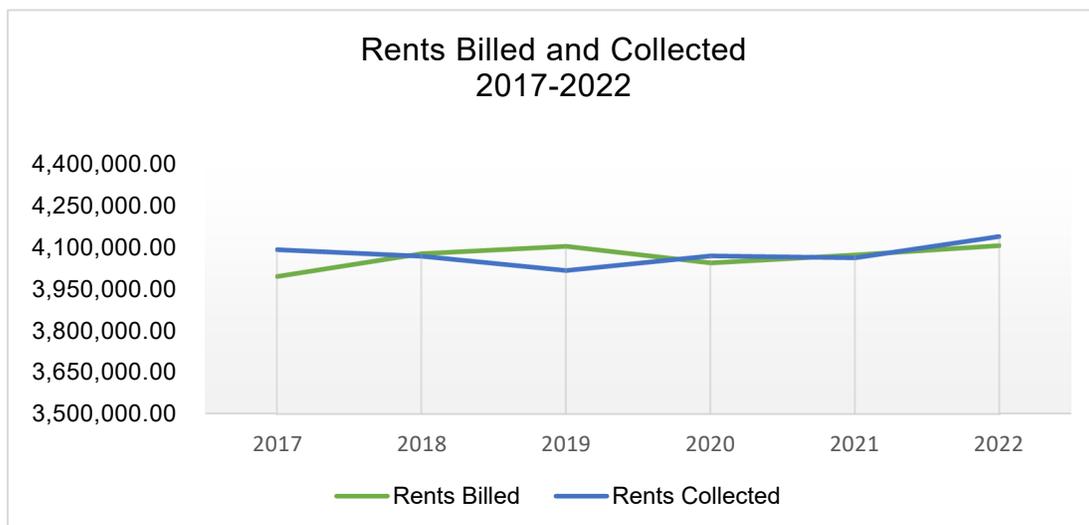
Customer Type	# Of Water Customers	# Of Sewer Customers
Residential	2,242	2,021
Discounted Residential	2	19
Apartments	101	89
Commercial	338	310
Industrial	9	9
Tax Exempt	83	72
	2,775	2,520

\*Discounted Residential customers are those who apply and qualify pursuant to N.J.S.A. 54:4-80.40 for a senior citizen, disability, or surviving spouse tax deduction.

## Revenue

The current water and sewer rates were set by Ordinance 2016-17 and billed based on the gallons of water used by the customer per quarter. The current rates set a minimum rate for 0 to 4,000 gallons used per quarter and charge an additional fee based on usage over 4,000 gallons.

Rents billed and rents collected have been extremely consistent since Ordinance 2016-17 took effect:



Water and Sewer rents make up approximately 88% of the cash in-flows for the utility. Other revenues include interest charges, connections fees, inspection fees, additional meter purchases, and final meter readings. These other revenues have averaged \$83,523 annually since 2017. Fund Balance, when available, is allocated as a revenue and has averaged \$573,865 during the same period.

The total gallons of water billed has a direct relationship with the cash flow and has followed the same consistency:

<b>Billable Gallons</b>					
<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
195,037,984	191,612,893	190,440,970	196,795,834	196,324,168	188,477,346

This level of consistency in usage and collection has tremendous value to the municipality in that it offers a dependable and predictable revenue stream that can be forecasted and managed to a desired result.

### ***Operating Expenses***

While revenues have remained relatively flat, the costs to operate the utility have been increasing year after year. Operating expenses make up approximately 70% of the budget, while capital and debt service costs average approximately 30%.

Operating expenses include salaries and related fringe benefits. These fringe benefits include health benefits, pension contributions, and employer taxes. Other operating expenses include parts and repairs, service contracts, utilities, and general supplies. Salary costs are driven by collective bargaining agreements and the increase in the New Jersey minimum wage. As the minimum wage increases to the \$15 per hour target, there is upward pressure on all wages related to part-time work.

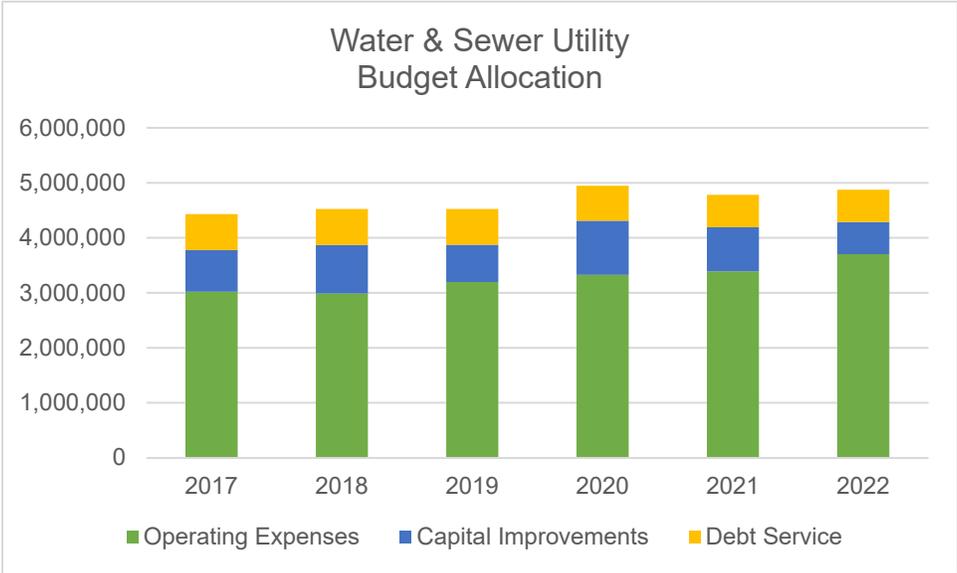
The current economic climate is placing even more stress on the utility budget. Inflation has increased the cost of supplies and services across the board. Supply chain issues have amplified the problem. Overall, operating expenses have increased by 23% since 2017.

The Town is projecting even higher than normal operational increases for the 2023 budget. Water chemical supplies are bid out annually. This cost has increased from \$58,000 in 2022 to \$112,000 in 2023. The sewer digester operation is also an annual bid and is increasing from \$224,000 to \$310,000 due to increased transportation and processing costs. In addition, the statutory Public Employee Retirement System contribution payment is increasing by 15%.

**Capital Improvement and Debt**

Maintaining capital infrastructure and making capital improvements are essential for a water and sewer utility as they ensure the reliability, safety and efficiency of the system, enabling the utility to provide clean, safe, and accessible water and sewer services to the community. These improvements can range from replacing aging infrastructure, upgrading outdated technology, and expanding the system to meet growing demand. Furthermore, such investments can improve the overall financial sustainability of the utility by reducing the cost of operation and maintenance, improving the efficiency of water and sewer services, and avoiding the costly repair and replacement of infrastructure that has reached the end of its useful life.

Capital expenses and related debt service costs account for approximately 30% of the utility budget. A breakdown of the total utility budget, highlighting the capital and debt allocations, is presented below:



Newton has traditionally funded annual capital improvements with cash by allocating funds in the annual budget towards capital outlay and the capital improvement fund. This is a fiscally sound practice that significantly reduces financing costs and reduces the overall debt burden on the utility

Larger scale projects, however, do require financing in the form of bond anticipation notes, serial bonds, or loans. Current outstanding debt is \$7,515,625.23.

	2017	2018	2019	2020	2021	2022
<b>Serial Bonds Payable</b>	8,074,194.99	7,756,434.43	7,464,406.54	7,153,142.47	7,132,520.48	6,729,984.66
<b>Loans Payable</b>		833,177.25	821,290.46	809,074.53	796,520.35	783,618.57
	8,076,211.99	8,591,629.68	8,287,716.00	7,964,237.00	7,931,061.83	7,515,625.23

As the utility ages, increased investment into capital improvements and infrastructure is required. Federal and State legislation has been consistently tightening the regulations that water and wastewater utilities operate within to advance the public welfare and reduce environmental impact. For example, N.J.S.A 58:12A-0 et seq. which mandates the identification and replacement of all lead service lines within the next decade.

The Town of Newton Administration is committed to maintaining the infrastructure of the utility and has prepared a capital plan that identifies \$9 million in projects and improvements over the next 5 years (2023-2027). These projects include sewer line repairs, lead line replacement, chemical room upgrades, pump station upgrades, and various other improvements. This is a proactive investment plan that is designed to promote customer safety, stay ahead of costly failing infrastructure, and comply with federal/state regulations.

**Fund Balance**

	2017	2018	2019	2020	2021	2022 (est)
<b>Fund Balance</b>	886,951	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041
<b>Revenue &amp; Other Income</b>						
Fund Balance	330,000	407,000	407,250	845,972	593,703	643,262
Rents	4,091,231	4,067,878	4,016,306	4,068,984	4,061,838	4,079,001
Other Revenue	287,300	343,384	826,705	288,513	329,054	496,909
Lapse of Prior Year Budget	196,605	340,563	624,480	398,352	476,493	609,183
	4,905,136	5,158,824	5,874,741	5,601,822	5,461,089	5,828,356
<b>Expenditures</b>	(4,391,320)	(4,522,355)	(4,507,015)	(4,952,287)	(4,781,621)	(4,829,348)
<b>Fund Balance Anticipated</b>	(330,000)	(407,000)	(407,250)	(845,972)	(593,703)	(643,262)
<b>Ending Balance</b>	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041	2,505,787

The utility maintains a strong fund balance of approximately \$2.5 million as of December 31, 2022, which is slightly above 50% of the total operating budget. As a best practice, the Governmental Finance Officers of America recommends a fund balance level of 25% total expenditures. The utility is well above this threshold.

Fund balance has increased from a balance of \$886,950.69 in 2017 despite relatively flat rent collection. This has been accomplished through responsible expense management and the occasional receipt of larger, non-recurring revenues like connection fees.

# Projections

Utilizing the data provided by the Town, we have compiled financial projections to help guide the decision making process.

Below is a projection of the capital improvement plan budgetary impact.

	Capital Plan 2023-2027				
	2023	2024	2025	2026	2027
<b>Capital Improvement Fund</b>	255,000	120,000	180,000	200,000	200,000
<b>Bonds, Notes, and Loans</b>	2,995,000	1,030,000	1,800,000	900,000	1,500,000
	3,250,000	1,150,000	1,980,000	1,100,000	1,700,000
<b>Estimated Annual Principal</b>	99,833	130,839	186,478	210,262	253,253
<b>Estimated Annual Interest</b>	119,800	157,007	223,773	252,314	303,904
<b>Additional Debt Service</b>	219,633	287,846	410,251	462,576	557,156

Debt can be financed and structured in a variety of ways by utilizing a combination of short term notes, serial bonds, and loans. Interest rates will fluctuate as well, and the ultimate financing plan is undetermined at this time. This projection utilized an average amortization of 30 years and assumed interest rate is 4% in order to provide an estimated budgetary impact of the capital plan.

Projecting the entire Water and Sewer Utility budget clearly indicates that the current revenue stream cannot support the anticipated increase in expenses. In the model below, we have projected operating results, including the projected capital improvement plan costs, utilizing an average 2% increase to operations, and including the large contractual increases for water chemical and the sewer digester:

	Projected				
	2022	2023	2024	2025	2026
<b>Beginning Fund Balance</b>	2,150,040.93	2,150,041.93	2,150,042.93	2,150,043.93	2,150,044.93
<b>Revenue and Other Income</b>					
Fund Balance	643,262.00	950,000.00	1,250,000.00	1,300,000.00	600,923.58
Rents	4,079,001.15	4,070,000.00	4,070,000.00	4,070,000.00	4,070,000.00
Other Revenue	496,909.10	350,000.00	350,000.00	350,000.00	350,000.00
Lapse of Prior Year Budget	609,183.48	350,000.00	400,000.00	400,000.00	400,000.00
	5,828,355.73	5,720,000.00	6,070,000.00	6,120,000.00	5,420,923.58
<b>Expenditures</b>	(4,829,348.00)	(5,065,934.96)	(5,386,886.99)	(5,512,836.95)	(5,595,498.84)
<b>Fund Balance Anticipated</b>	(643,262.00)	(950,000.00)	(1,250,000.00)	(1,300,000.00)	(600,923.58)
<b>Ending Fund Balance</b>	2,505,786.66	2,209,851.70	1,642,964.71	950,127.75	174,628.91
<b>Surplus (Deficit) in Operations</b>	355,745.73	(295,934.96)	(566,886.99)	(692,836.95)	(775,498.85)

With no rate increase, this analysis projects a deficit in operations of approximately \$420,000 in 2023. A larger portion of fund balance will have to be utilized as a revenue to balance the budget and it is unlikely to be fully replenished. The deficit would continue to grow as expenses increase and the capital plan is phased in. Please refer Schedule A for a full 10-year analysis and projection.

The rate of decline in fund balance due to the growing deficit may not be as rapid as projected, as it is likely that the capital improvement plan may not be fully implemented each year. Large scale projects take time to plan, bid, award, and complete. There will also be some reductions in the annual capital improvement fund expense, as a larger portion of capital funding will come from debt. Nevertheless, it is very clear that a rate increase is required to prevent a budgetary deficit in 2023 and future years.

## Comments and Recommendations

1. The Town has done well to manage the expenses of the utility since the 2017 rate increase. Revenues have been consistent, but stagnant, for 6 years. Despite this, the utility has increased its fund balance to budget ratio above 50%.
2. The Town has a robust capital improvement plan designed to ensure the reliability, safety and efficiency of the system while also complying with Federal and State regulation. Capital investment reduces costly emergency repairs and increases efficiency while decreases costs.
3. It is recommended that the Town explore Federal and State funding opportunities to aid in the financing of the capital plan. Government backed loans often allow for competitive interest rates and longer-term amortization. Certain loans allow for principal forgiveness.
4. To avoid an operational deficit, it is recommended that the Town adopt a fee ordinance to update the Water and Sewer rates as follows:
  - a. Implement a Capital Improvement fee of \$10 per quarter for Water and \$10 per quarter for Sewer. This will equate to a \$20 quarterly charge and is designed to cover a portion of the debt service related to upcoming capital improvements. The flat fee also provides an additional baseline revenue that will not fluctuate based on usage.
  - b. Implement a general rate increase on the following schedule:
    - i. 2023 – 5%
    - ii. 2024 – 5%
    - iii. 2025 – 2.5%
    - iv. 2026 – 2.5%

5. Implementing the recommended capital fee and rate increases, we can estimate the follow collections based on historical usage:

- a. 2021: \$4,061,838 (Actual)
- b. 2022: \$4,079,001 (Actual)
- c. 2023: \$4,486,930 (Projected)
- d. 2024: \$4,700,176 (Projected)
- e. 2025: \$4,812,131 (Projected)
- f. 2026: \$4,926,884 (Projected)

\*Full historical and projected financials are included on Schedule B

6. The impact on the average quarterly bill, assuming the addition of a capital surcharge and application of the suggested rate increases, is presented below:

<b>Customer Type</b>	<b>2022 Average Quarterly Bill</b>	<b>2023 Projected</b>	<b>2024 Projected</b>	<b>2025 Projected</b>	<b>2026 Projected</b>
Residential	\$221	\$252	\$264	\$271	\$278
Residential (D)	\$96	\$120	\$126	\$130	\$133
Apartments	\$966	\$1,035	\$1,086	\$1,114	\$1,141
Commercial	\$673	\$727	\$763	\$782	\$802
Industrial	\$1,633	\$1,735	\$1,822	\$1,867	\$1,914
Tax Exempt	\$2,341	\$2,478	\$2,602	\$2,667	\$2,733

7. The timeline of the capital improvement program, and the structure of financing associated with the program, will likely be the primary driver of the utility budget in the coming years. Water and Sewer rates should be analyzed again in 2026 to maintain the financial health of the utility.

**Schedule A**  
**Water & Sewer Utility Operating Results and Projections (With No Rate Action)**

	Audited Financials						Unaudited	Projected (With No Rate Increase)			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Beginning Fund Balance</b>	842,620	886,951	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041	2,505,787	2,209,852	1,642,965	950,128
<b>Revenue and Other Income</b>											
Fund Balance	303,000	330,000	407,000	407,250	845,972	593,703	643,262	950,000	1,250,000	1,300,000	600,924
Rents	3,539,857	4,091,231	4,067,878	4,016,306	4,068,984	4,061,838	4,079,001	4,070,000	4,070,000	4,070,000	4,070,000
Other Revenue	322,343	287,300	343,384	826,705	288,513	329,054	496,909	350,000	350,000	350,000	350,000
Lapse of Prior Year Budget	155,729	196,605	340,563	624,480	398,352	476,493	609,183	350,000	400,000	400,000	400,000
	4,320,929	4,905,136	5,158,824	5,874,741	5,601,822	5,461,089	5,828,356	5,720,000	6,070,000	6,120,000	5,420,924
<b>Expenditures</b>	(3,973,599)	(4,391,320)	(4,522,355)	(4,507,015)	(4,952,287)	(4,781,621)	(4,829,348)	(5,065,935)	(5,386,887)	(5,512,837)	(5,595,499)
<b>Fund Balance Anticipated</b>	(303,000)	(330,000)	(407,000)	(407,250)	(845,972)	(593,703)	(643,262)	(950,000)	(1,250,000)	(1,300,000)	(600,924)
<b>Ending Fund Balance</b>	886,951	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041	2,505,787	2,209,852	1,642,965	950,128	174,629
<b>Surplus (Deficit) in Operations</b>		183,816	229,470	960,477	(196,437)	85,765	355,746	(295,935)	(566,887)	(692,837)	(775,499)

2022 projections based on unaudited financials provided by the Town of Newton

2023-2026 projections based on contractual increases, general operating expense increase of 2%, and additional debt service estimates based on capital project plan (2023-2027)

**Schedule B**  
**Water & Sewer Utility Operating Results and Projections (With Proposed Rate Increases)**

	Audited Financials						Unaudited	Projected (With Proposed Rate Increases)			
	2016	2017	2018	2019	2020	2021		2022	2023	2024	2025
<b>Beginning Fund Balance</b>	842,620	886,951	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041	2,505,787	2,626,782	2,640,071	2,689,365
<b>Revenue and Other Income</b>											
Fund Balance	303,000	330,000	407,000	407,250	845,972	593,703	643,262	650,000	650,000	650,000	650,000
Rents	3,539,857	4,091,231	4,067,878	4,016,306	4,068,984	4,061,838	4,079,001	4,486,930	4,700,176	4,812,131	4,926,884
Other Revenue	322,343	287,300	343,384	826,705	288,513	329,054	496,909	350,000	350,000	350,000	350,000
Lapse of Prior Year Budget	155,729	196,605	340,563	624,480	398,352	476,493	609,183	350,000	350,000	400,000	400,000
	4,320,929	4,905,136	5,158,824	5,874,741	5,601,822	5,461,089	5,828,356	5,836,930	6,050,176	6,212,131	6,326,884
<b>Expenditures</b>	(3,973,599)	(4,391,320)	(4,522,355)	(4,507,015)	(4,952,287)	(4,781,621)	(4,829,348)	(5,065,935)	(5,386,887)	(5,512,837)	(5,595,499)
<b>Fund Balance Anticipated</b>	(303,000)	(330,000)	(407,000)	(407,250)	(845,972)	(593,703)	(643,262)	(650,000)	(650,000)	(650,000)	(650,000)
<b>Ending Fund Balance</b>	886,951	1,070,767	1,300,236	2,260,713	2,064,276	2,150,041	2,505,787	2,626,782	2,640,071	2,689,365	2,770,750
<b>Surplus (Deficit) in Operations</b>		183,816	229,470	960,477	(196,437)	85,765	355,746	120,995	13,289	49,294	81,385
2022 projections based on unaudited financials provided by the Town of Newton											
2023-2026 projections based on contractual increases, general operating expense increase of 2%, and additional debt service estimates based on capital project plan (2023-2027)											