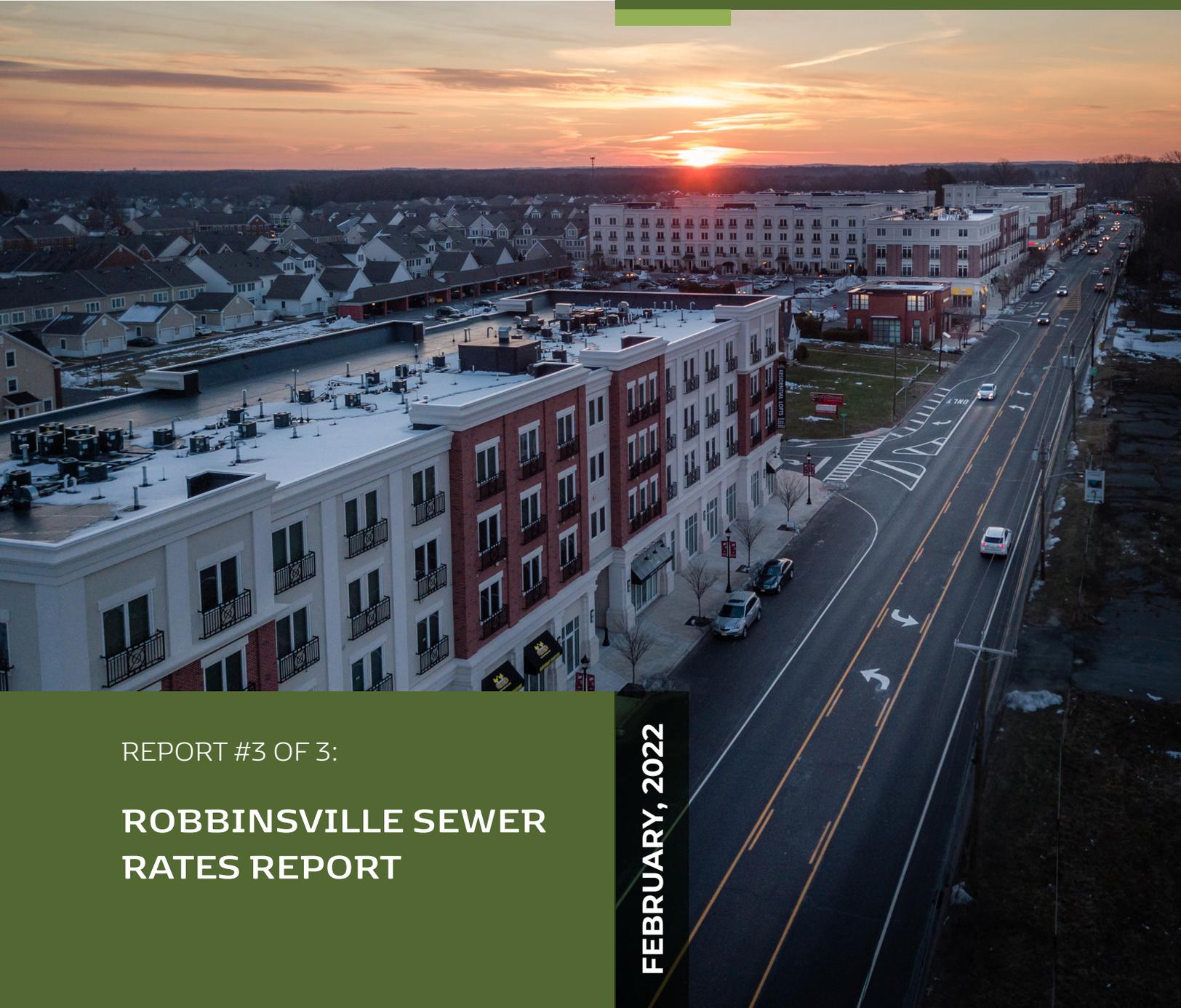


NewGen Strategies & Solutions

www.newgenstrategies.net

MULTI-MUNICIPAL SEWERAGE SYSTEM COST ALLOCATION STUDY



REPORT #3 OF 3:

ROBBINSVILLE SEWER RATES REPORT

FEBRUARY, 2022



Prepared for:
Robbinsville Township, New Jersey
2298 Route 33
Robbinsville, NJ 08691

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911-A Commerce Road
Annapolis, MD 21401
Phone: (410) 266-9101

February 2, 2022

Paul V. Renaud III, Esq.
Director of Community Development
Township of Robbinsville
2298 Route 33
Robbinsville, NJ 08691

Subject: Report #3 of 3: Robbinsville Sewer Rates Report

Dear Mr. Renaud:

NewGen Strategies and Solutions, LLC (NewGen) is pleased to submit to the Township of Robbinsville this report detailing our completed Sewer Rate Study. This report details the results of our analysis of the forecasted costs of providing wastewater service to the Township's retail customers and our recommendations for recovering these costs over the next five years. Included in this report are assumptions regarding the cost allocation to the Township's wastewater customers in Robbinsville Township, which are described in our Report #1 of 3: Wastewater System Cost Allocation Report.

We appreciate the opportunity to provide our professional services to the Township and would like to express our sincere appreciation to Township staff. The dedication and assistance provided by Township staff was essential to the completion of this study. It has been a distinct pleasure to work with the Township of Robbinsville.

Should you require additional information regarding the enclosed report, please contact me at 443-951-4207 or via e-mail at ecallocchia@newgenstrategies.net.

Very truly yours,

DocuSigned by:


C11651334F8F462...
Eric Callocchia

Principal
NewGen Strategies and Solutions, LLC

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EXECUTIVE SUMMARY

This section of the report summarizes the major findings and recommendations that are the result of the study.

Projected Wastewater System Revenue Requirement

NewGen’s forecast of the Robbinsville wastewater system revenue requirements is shown in Table E-1. This forecast includes all operating and maintenance, debt service, capital investment, and reserve contributions for the next five fiscal years (FY 2022 – FY 2026). Also included is the assumption that Hamilton and Robbinsville Townships adopt the system wide cost allocation developed in NewGen’s Report #1 of 3: Wastewater System Cost Allocation Report.

Table E-1
Robbinsville Wastewater System Net Revenue Requirement Projection

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Robbinsville O&M	\$850,076	\$874,550	\$899,743	\$925,676	\$952,371	\$979,851
Sewerage Processing	\$3,091,896	\$2,678,474	\$2,829,624	\$2,905,778	\$2,996,859	\$2,858,889
Reserve Funded Capital	\$343,750	\$415,050	\$592,350	\$260,350	\$539,050	\$288,500
Existing Debt Service	\$284,401	\$134,800	\$146,200	\$142,000	\$137,800	\$133,600
New Debt Service	\$ -	\$143,503	\$166,768	\$178,516	\$190,851	\$286,728
Total Rev. Req.	\$4,570,122	\$4,246,377	\$4,634,685	\$4,412,320	\$4,816,932	\$4,547,568
Less: Misc. Revenues	(\$122,478)	(\$588,548)	(\$162,254)	(\$162,254)	(\$162,254)	(\$162,254)
Net Rev. Req.	\$4,447,644	\$3,657,828	\$4,472,431	\$4,250,065	\$4,654,677	\$4,385,314

The above forecast includes reasonable cost escalation and an assumption that Robbinsville Township will finance a portion of its planned capital improvement plan with new debt service beginning in FY 2022.

Recommended Revenue Increases

Based on the net revenue requirement forecast in Table E-1, NewGen projected the wastewater system’s expenses and revenues for the next five fiscal years assuming that the Township did not increase any wastewater rates or fees. Exhibits E-2 and E-3 show the resulting expense and revenue forecast and resulting Sewer Fund balance assuming Robbinsville’s rates remain at the FY 2021 level.

Exhibit E-2 Robbinsville Wastewater System Expenses vs. Revenues Under FY 2021 Rates

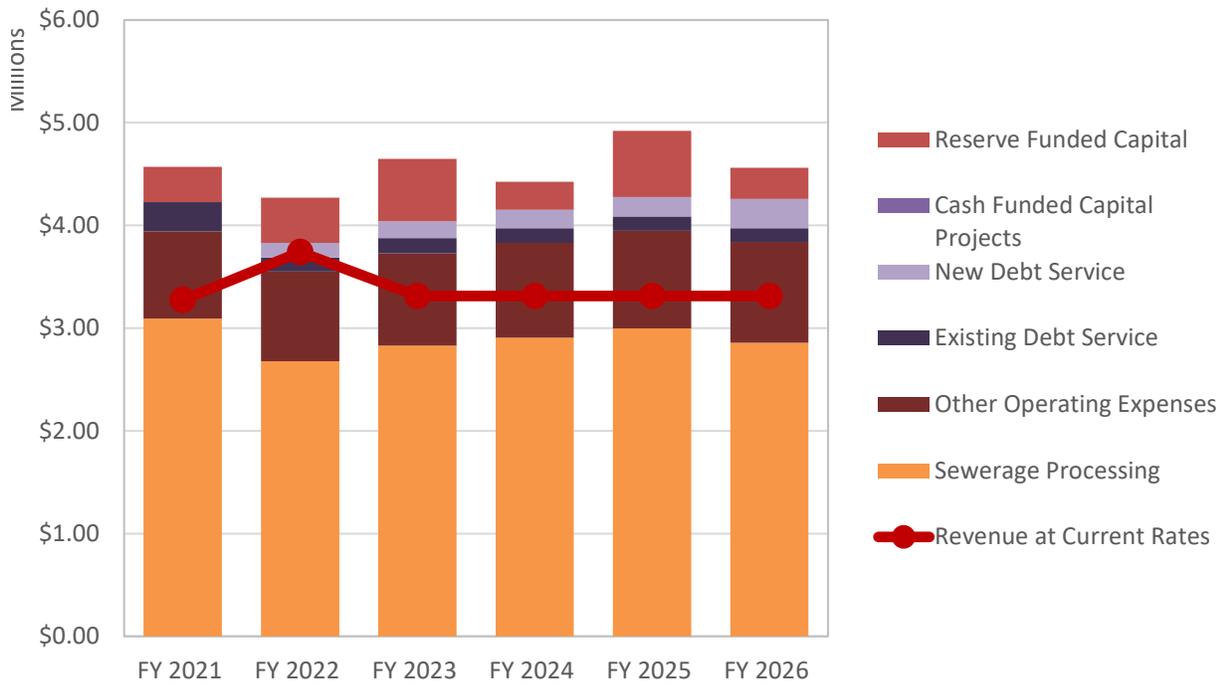
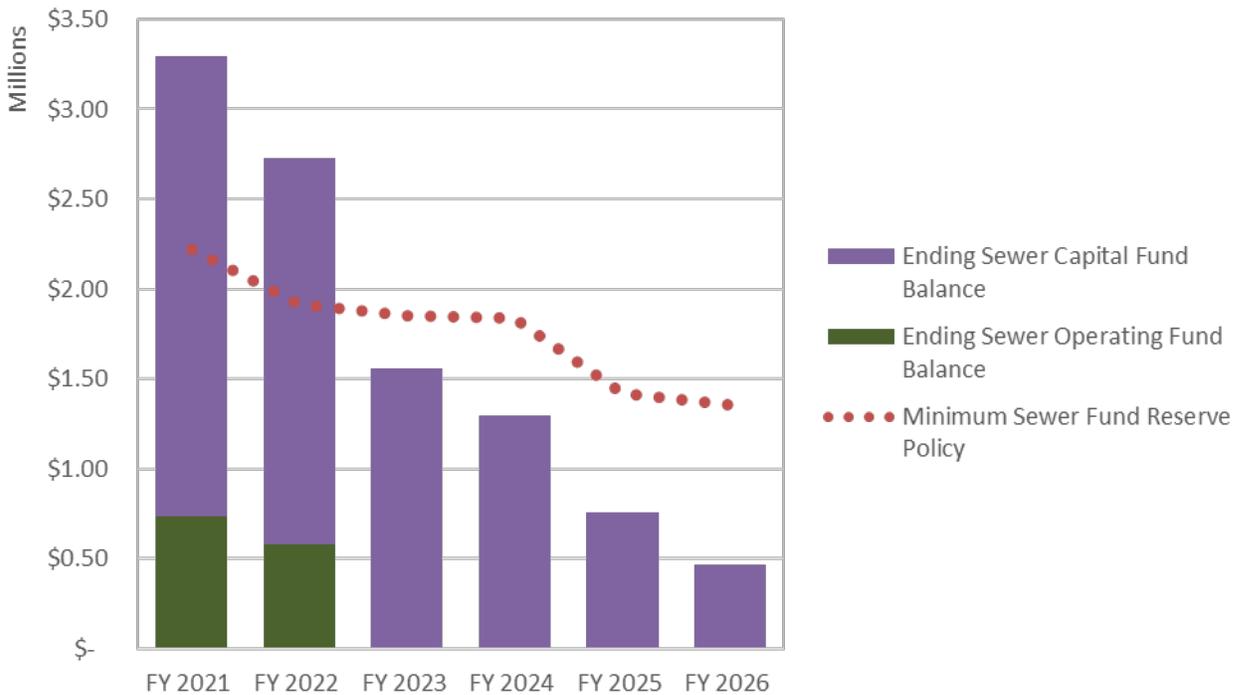


Exhibit E-3 Projected Sewer Fund Cash Balance Projection Under FY 2021 Rates



Executive Summary

Robbinsville’s FY 2021 sewer rates are not sufficient to support the forecasted operating, debt service, capital investment of Robbinsville’s wastewater system. NewGen’s study identified increases to Township’s wastewater rates and fees that would sustain the Township’s wastewater system given the forecasted costs.

**Table E-2
Recommended Sewer Rate Increases**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Rate Increase	0.0%	25.0%	3.0%	3.0%	3.0%	3.0%
FY Month Effective	N/A	July	July	July	July	July
Resulting Cash Flow						
Beginning Fund Balance	\$4,631,704	\$3,296,335	\$3,114,565	\$2,578,083	\$2,381,790	\$1,812,231
Operating Income / (Loss)	(\$991,619)	\$233,281	\$55,868	\$64,057	(\$30,509)	\$203,277
Use of Reserves	(\$343,750)	(\$415,050)	(\$592,350)	(\$260,350)	(\$539,050)	(\$288,500)
Ending Fund Balance	\$3,296,335	\$3,114,565	\$2,578,083	\$2,381,790	\$1,812,231	\$1,727,008
Minimum Required Balance	\$2,221,869	\$1,914,675	\$1,852,587	\$1,839,359	\$1,418,093	\$1,356,002

Customer Bill Impacts

Assuming the Township adopt rates effective July 1 each fiscal year, the impact on a Robbinsville Township Single Family Residential customer is shown in Table E-3:

**Table E-3
Projected Annual Customer Bills – Recommended Rates**

Sample Customer	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
One EDU Customer	\$425.00	\$478.13	\$539.22	\$555.40	\$572.06	\$589.22
\$ Change		\$53.13	\$61.09	\$16.18	\$16.66	\$17.16
% Change		12.50%	12.78%	3.00%	3.00%	3.00%

Section 1

STUDY BACKGROUND AND SCOPE OF WORK

Study Background

The construction of the Robbinsville Township sewer collection system began in 1977 under the ownership of the Washington Township Municipal Utilities Authority (WTMUA) and began operation in 1981. The Township of Robbinsville acquired the system assets from the WTMUA in 2007. Robbinsville’s sanitary sewer collection system consists of approximately 73 miles of existing gravity mains and 7 miles of force mains. Currently, the Robbinsville’s wastewater is treated by the Township of Hamilton under the provisions of a Multi-Municipal Sewerage Agreement (Agreement) between the Townships.

Through a joint engagement, the Townships of Hamilton and Robbinsville engaged NewGen Strategies and Solutions, LLC to complete a Sewer Cost of Service and Rate Study. The objectives of the study were to:

“Analyze both Hamilton’s and Robbinsville’s different rate structures and charges, with particular attention paid to financial stability, equity, wastewater management and other best management practices. Other important considerations include ratepayer sensitivity, economic competitiveness, ease of implementation, future system needs, affordable housing stock and regulatory/wastewater quality concerns.”

A key component of this analysis was the appropriate cost allocation methodology for Robbinsville’s and Robbinsville’s use of the MMSS. NewGen’s Report #1 of 3: Wastewater System Cost Allocation Report details alternative methodologies to calculate Robbinsville’s cost for its use of the MMSS. This report assumes that beginning in FY 2022 the Townships of Hamilton and Robbinsville implement the system wide cost allocation provided in NewGen’s Report #1.

This Report #3 of 3: Robbinsville Sewer Rates Report details the results of NewGen’s sewer rate study for the Township of Robbinsville. Included in this report are forecasts of Robbinsville’s wastewater system operating, debt service, capital investment, and reserve contributions as well as recommended rate adjustments to maintain Robbinsville’s Sewer Fund reserves.

Study Scope of Work and Objectives

NewGen’s scope of work included several related tasks. The study has resulted in several recommendations regarding the cost allocation of the MMSS and how best to collect each Township’s wastewater utility revenue. Table 1-1 lists the specific tasks of NewGen’s study.

Table 1-1
Study Scope of Work Tasks

Task #	Description
Task 1	Review Existing Data and Project Kickoff Meeting
Task 2	Identify Policy Issues



**Table 1-1
Study Scope of Work Tasks**

Task #	Description
Task 3	Review Capital Improvement Plan
Task 4	Review O&M Costs
Task 5	Evaluate Current and Projected Demand
Task 6	Analyze Current and Projected Debt Service
Task 7	Evaluate Potential Financing Sources
Task 8	Develop Revenues from Miscellaneous Fees
Task 9	Develop Revenue Requirement From Rates
Task 10	Compare Revenue Requirement to Projected Revenues
Task 11	Develop Cost of Service
Task 12	Identify and Evaluate Rate Alternatives
Task 13	Develop Recommended Rates
Task 14	Document Financial Model
Task 15	Final Report and Presentations

The broad objectives of the study were as follows:

- Determine the true cost of providing service to the customers of the Robbinsville wastewater system, including the appropriate costs for the service to customers in Robbinsville. Customers include residential, commercial and industrial users.
- Evaluate the current cost allocation methodology used to allocate system costs to the MMSS and to the Townships.
- Develop an industry standard cost allocation to account for the shared use of the MMSS by the Townships.
- Develop a financial plan and wastewater rates for both Townships given the results of the new MMSS cost allocation.

The objectives of this study required the development of a cost allocation methodology that is consistent with industry standards, understandable and agreeable to stakeholders at both Townships, and able to be clearly described in a formula to be incorporated into either a revised Agreement or new agreement between the Townships.

This report describes the impact of the recommended cost allocation on Robbinsville’s retail sewer rates.

Guiding Principles of the Study

NewGen applies several guiding principles to every rate study. These principles inform key decisions throughout the study so that the study's results are consistent with both industry standards and the realities and perceptions of system customers. While these guiding principles serve as benchmarks for results, ultimately the results of any study are based on the data relating to each system's design and operation.

- Each Township's wastewater utility must be financially self-supporting. It is assumed that the cost of operating and maintaining each system will be supported by the wastewater fees and charges collected from each system's customers with no support or subsidy from other Township revenues.
- Each Township's wastewater rates shall be sufficient to ensure the funding of an appropriate level of system rehabilitation and replacement.
- Wastewater rates in each Township are recommended to be kept as low as practical while balancing the other guiding principles of the study.
- Each Township shall maintain reserves to provide for contingencies and unplanned expenses.
- These guiding principles allow NewGen to evaluate whether the study has achieved the requirements relating to financial sustainability and stakeholder understanding.

Fiscal Year

Robbinsville Township operates on a fiscal year beginning January 1st and ending on December 31st each year. All years shown in this report refer to the fiscal year ending that year. For example, 2021 refers to the fiscal year beginning January 1, 2021 and ending December 31, 2021.

Section 2

WASTEWATER SYSTEM REVENUE REQUIREMENTS

The first step of the rate study is to compile the costs of owning and operating Robbinsville’s wastewater utility system. The three cost components of the Township’s wastewater system are: Operating and Maintenance, Capital Improvements, and Debt Service (both existing and future). These three cost components total to the amount needed each year to run the wastewater system. Also, each year the Township must maintain a minimum amount of reserves in its Sewer Fund.

While the study is based on the latest available actual data, there are several major assumptions that are included in the study’s cost projections.

Major Study Assumptions

In order to project the operating, debt service, and capital expenses of the Township’s wastewater system, several major assumptions must be made. NewGen’s assumptions are conservative to ensure that the study’s recommendations reflect a reasonable projection of the costs of the Township’s system.

Operating Budget Escalation Factors

NewGen’s cost projections are based on the latest available actual and budgeted data. The basis for NewGen’s forecasts is the Township’s FY 2021 budget. In order to reasonably project future costs, NewGen applied escalation and inflation factors to the Township’s budget line items. NewGen’s financial model includes the following operating and maintenance budget line item inflation factors in Table 2-1. NewGen used the most up to date historical data related to the three items projected to increase in the future:

- United States Bureau of Labor Statistics (BLS) Employment Cost Index (ECI) current annualized increase in labor costs as of June 2020.
- United States Bureau of Labor Statistics (BLS) Consumer Price Index – Urban (CPI-U) at the end of 2020.
- Engineer News Record (ENR) Materials Cost Index (MCI) averages the increased cost of materials over the past 30 years.

Table 2-1
Operating Budget Escalation Factors

	Change Per Year	Source
Wages and Salaries	2.60%	BLS Employment Cost Index – June 2020
Benefits	3.10%	BLS Employment Cost Index – June 2020
Services (Contractual, Professional)	2.90%	ENR CCI 30 Year Average
Supplies (Maintenance, Construction Materials)	2.00%	ENR Materials Index 30 Year Average
Equipment and Maintenance	2.90%	ENR CCI 30 Year Average



On average, NewGen projects that Robbinsville’s wastewater utility operating budget will increase 2.7% per year over the five-year projection period.

Minimum Required Wastewater Fund Cash Balance

Maintaining a minimum Wastewater Fund cash balance is an essential component of the proper financial management of the Township’s wastewater system. The wise management of resources and maintenance of a reasonable cash balance allows the Township to be responsive to emergencies and to plan for long term sustainability. As a part of the wastewater rate study, NewGen developed a policy regarding the minimum fund balance reserves that are appropriate for the Township’s wastewater utility fund. There are two components to the study’s recommended minimum cash balance:

- **Operating Reserve** – The minimum operating reserve balance shall be 90 days of each year’s annual Operating and Maintenance (O&M) expenses (not including debt service).
 - **Capital Reserve** – The minimum capital reserve balance shall be a rolling five year average of annual capital spending. For example, the minimum balance at the end of FY 2021 shall be the average planned CIP spending from FY 2021 through FY 2026. The minimum balance at the end of FY 2022 shall be the average planned CIP spending from FY 2022 through FY 2027, and so on.
- The minimum reserve projection is shown below in Table 2-2.

**Table 2-2
Minimum Wastewater Fund Cash Balance Recommendation**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Reserve	\$971,993	\$876,088	\$919,570	\$944,742	\$973,783	\$946,539
Capital Reserve	1,793,723	1,249,876	1,038,587	933,017	894,617	444,310
Total Minimum Cash Balance	\$2,765,716	\$2,125,964	\$1,958,157	\$1,877,759	\$1,868,400	\$1,390,848

The minimum cash balance policy drives the financial plan detailed in this report. Rates and fees are set in order to cover the operating, debt service, and capital needs of the system, as well as to maintain the minimum cash balance shown above. If at any time the projected rates in a given year would not sustain the minimum cash balance in the next fiscal year, then rates must be increased to achieve the minimum required balance.

Operating and Maintenance Expenses

NewGen’s study is based on the FY 2021 adopted O&M budget, excluding debt service payments. Robbinsville’s FY 2021 adopted sewer operating budget totals about \$3.94 million as shown in Table 2-3 below.

A major assumption included in NewGen’s O&M cost forecast is that Hamilton and Robbinsville Townships agree to adopt the Alternative “Shared System” cost allocation method developed by NewGen as described in our Report #1 of 3: Wastewater System Cost Allocation Report beginning in FY 2022.

**Table 2-3
Projected Operating and Maintenance Expenses**

	Adopted FY 2021	Projected FY 2022	Projected FY 2023	Projected FY 2024	Projected FY 2025	Projected FY 2026
Robbinsville O&M	\$850,076	\$874,550	\$899,743	\$925,676	\$952,371	\$979,851
Sewerage Treatment	\$3,091,896	\$2,678,474	\$2,829,624	\$2,905,778	\$2,996,859	\$2,858,889
Total O&M Expenses	\$3,941,972	\$3,553,024	\$3,729,367	\$3,831,454	\$3,949,230	\$3,838,740
% Change		(10.9%)	4.73%	2.66%	2.98%	(2.9%)

In general, Robbinsville’s operating budget is appropriate given the size of its system. The FY 2021 O&M budget reflects spending of \$538 per retail unit, which is near the 75th percentile of nationwide systems service less than 50,000 connections¹. The rates and fees developed in this study are sufficient to cover the increasing operating and maintenance costs of the wastewater utility.

Existing Debt Obligations

As of FY 2021, Robbinsville’s wastewater system had outstanding debt payments related to one long term loans with an outstanding principal amount owed of \$1,600,000 and a Bond Anticipation Note with principal and interest payment in FY 2021 of \$146,807. The amortization schedule related to the Township’s GO 2020 Bonds extends to FY 2035. NewGen’s study includes payment for all of Robbinsville’s existing debt obligations. Table 2-4 shows Robbinsville’s wastewater system loan payments over the five-year study planning period.

**Table 2-4
Future Robbinsville Debt Service Payments – FY 2021 through FY 2026**

Loan	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
GO Bond Series 2020	\$137,593	\$134,800	\$146,200	\$142,000	\$137,800	\$133,600
BAN Series 2020A	\$146,807	\$ -	\$ -	\$ -	\$ -	\$ -
Total Debt Service	\$284,401	\$134,800	\$146,200	\$142,000	\$137,800	\$133,600
% Change		(111.0%)	7.80%	(3.0%)	(3.0%)	(3.1%)

The rates developed in this report are sufficient to fund the above stated debt obligations now and through their maturities.

Capital Improvement Plan

A major component of owning a sustainable wastewater utility is the planning for the rehabilitation and replacement of assets. Robbinsville Township’s wastewater system Capital Improvement Plan (CIP) is a detailed listing of projects with planned completion years and anticipated project costs. The Township

¹ 2019 American Water Works Association (AWWA) Utility Benchmarking: Performance Management for Water and Wastewater

Wastewater System Revenue Requirements

can either pay cash for projects as they are completed (i.e., from annual revenues, or reserves), or the Township may issue new debt to finance projects with loan proceeds, and pay off the loans over a longer term. Table 2-5 summarizes the annual planned capital improvement projects provided to NewGen by Robbinsville during the study.

**Table 2-5
Robbinsville Wastewater Capital Improvement Plan**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Sewer Main Cleaning	\$55,000	\$57,750	\$60,750	\$64,000	\$67,250	\$70,750
Wet Well Cleaning	\$13,500	\$14,250	\$15,000	\$15,750	\$16,750	\$17,750
Fire Extinguisher	\$250	\$300	\$350	\$400	\$450	\$500
Emergency Jetting	\$5,000	\$5,250	\$5,550	\$5,850	\$6,150	\$6,500
Easements	\$15,000	\$15,000				
Manhole Repairs	\$15,000	\$15,750	\$16,750	\$17,750	\$18,750	\$19,750
Meadowbrook Road	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Route 130	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Route 33	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
AAA	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Saran Woods	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Fox Runne	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Matrix	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
7A	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Springside Pump Station	\$15,000	\$15,750	\$16,550	\$17,400	\$18,300	\$19,250
Meadowbrook Road		\$400,000				
Route 130 Upgrade					\$265,000	
Route 130 Generator		\$60,000				
Route 33 Upgrade Wet-Well Mounted Pumps			\$250,000			
Saran Woods Replacement		\$230,000				
Saran Woods Generator			\$20,000			
Matrix Upgrade**		\$300,000				
Town Center					\$1,800,000	
Miry Run Interceptor	\$75,000	\$75,000	\$75,000			
Assunpink Interceptor	\$30,000	\$30,000				
Miry Run Interceptor		\$175,000	\$150,000	\$157,500	\$165,375	\$173,644
Assunpink Interceptor		\$100,000	\$105,000	\$110,250	\$115,763	\$121,551
Total Wastewater CIP	\$343,750	\$1,620,050	\$847,350	\$528,100	\$2,620,188	\$583,694

Robbinsville's CIP reflects an appropriate level of system investment and will result in a well maintained and efficient wastewater system.

Section 2

It should be noted that two projects – the Meadowbrook Road Pump Station Upgrade and the Matrix Pump Station Upgrade are envisioned by Robbinsville to be developer funded. Therefore, NewGen’s study assumes that these projects would not impact Robbinsville rate payers.

The financial plan and rates developed during the study are projected to fully recover the cost of the above stated capital plan, including all cash outlays and additional debt service. The additional debt service projected for the loan financed projects is detailed in the next section of this report.

New Total Debt Service Projections

Robbinsville’s Sewer Capital Reserve balance at the end of FY 2020 was \$2,904,942. Given the forecasted level of capital spending, Robbinsville’s capital reserve balance is not sufficient to support the entire CIP over the next five years. Therefore, NewGen made an assumption that the Township would issue new debt service to fund a portion of the CIP over the five year projection period. Table 2-6 shows the estimated new debt issues included in NewGen’s forecasts for FY 2021 – FY 2026.

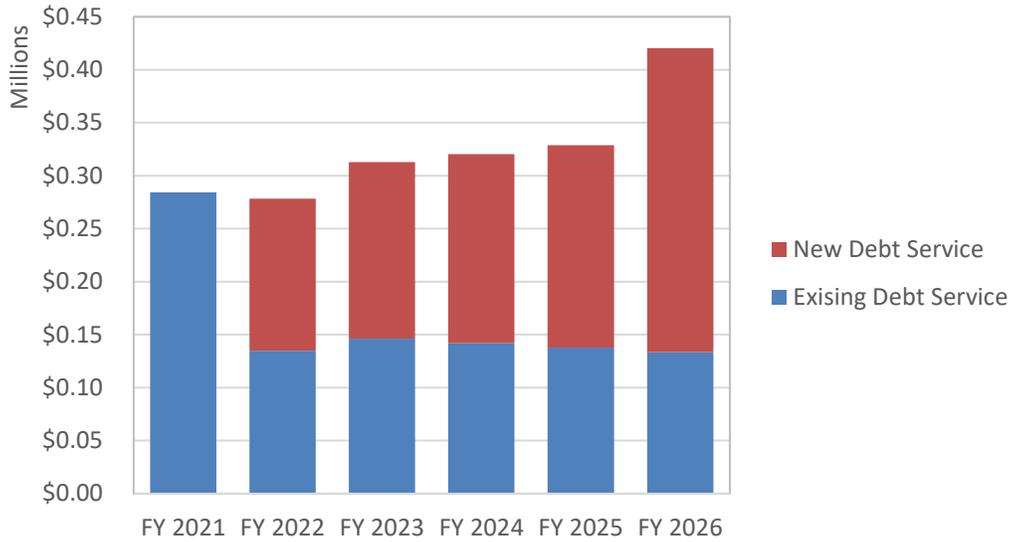
Table 2-6
Estimated Capital Financing Plan

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Total Wastewater CIP	\$3,302,925	\$1,670,050	\$847,350	\$528,100	\$2,620,188	\$583,694
Funded by Capital Reserves	\$343,750	\$440,300	\$605,100	\$273,738	\$643,107	\$303,260
Funded by New Debt Service	\$2,959,175	\$479,750	\$242,250	\$254,363	\$1,977,081	\$280,435
Funded by Developers	\$ -	\$750,000	\$ -	\$ -	\$ -	\$ -

It should be noted that Robbinsville will evaluate both its CIP and the level of new debt to be issued each year. The results of this study rely upon the above stated estimations and differences in actual results or initial data assumptions will have a material impact on the forecasts presented in this report. NewGen relied upon the most recently available information to develop our recommendations. Actual data available at a later time, changes in planned capital investment, or different debt financing assumptions will result in different rate increase needs.

The total projected debt service built into the study’s financial plan are shown in Exhibit 2-7. For each new debt issue, NewGen assumed a payment term of 30 years, an interest rate of 2.5%, and level annual payments.

Exhibit 2-7 Total Wastewater Debt Service Projections



The projected debt service payments shown above are included in the financial plan and recommended rates contained within this report.

Miscellaneous Non-Rate Revenues

Robbinsville’s wastewater utility is supported by revenues that are not related to the sewer rates charged to its residential and non-residential customers. There are two categories of non-rate revenues. The first are the Township’s sewer connection fees which are charged to new customers of the system. The second are other miscellaneous non-rate revenues. The Township’s FY 2021 budget included just over \$500,000 in revenues related to these two line items. NewGen, in order to be conservative, did not assume any increases in these revenues as a part of our forecasts. Table 2-8 shows the forecasted miscellaneous non-rate revenues included in the study.

Table 2-8
Miscellaneous Non-Rate Wastewater Revenues

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Miscellaneous	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000
Connection Fees	\$35,224	\$501,294	\$75,000	\$75,000	\$75,000	\$75,000
Interest - Berkshire Bank	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Sewer Rents (Newtown Village)	\$47,254	\$47,254	\$47,254	\$47,254	\$47,254	\$47,254
Total Non-Rate Revenues	\$122,478	\$588,548	\$162,254	\$162,254	\$162,254	\$162,254

The large increase in Connection fees in FY 2022 is the result of a large user paying a one-time fee. The future forecast of Connection Fee revenue are based on Township estimates.

Revenue Requirement Projection

Based on the latest available operating, debt service, and capital expense data and the methodologies and assumptions detailed above, NewGen developed a net revenue requirement forecast for the Township’s wastewater system, shown in Table 2-9.

**Table 2-9
Robbinsville Wastewater System Net Revenue Requirement Projection**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Robbinsville O&M	\$850,076	\$874,550	\$899,743	\$925,676	\$952,371	\$979,851
Sewerage Processing	\$3,091,896	\$2,678,474	\$2,829,624	\$2,905,778	\$2,996,859	\$2,858,889
Reserve Funded Capital	\$343,750	\$440,300	\$605,100	\$273,738	\$643,107	\$303,260
Existing Debt Service	\$284,401	\$134,800	\$146,200	\$142,000	\$137,800	\$133,600
New Debt Service	\$ -	\$143,503	\$166,768	\$178,516	\$190,851	\$286,728
Total Rev. Req.	\$4,570,122	\$4,271,627	\$4,647,435	\$4,425,707	\$4,920,988	\$4,562,328
Less: Misc. Revenues	(\$122,478)	(\$588,548)	(\$162,254)	(\$162,254)	(\$162,254)	(\$162,254)
Net Rev. Req.	\$4,447,644	\$3,683,078	\$4,485,181	\$4,263,453	\$4,758,734	\$4,400,073

The net revenue requirement is the basis upon which all rates and fees are calculated for the Township’s retail customers. Although the net revenue requirement varies from year to year, the financial plan developed during the study takes a long-term perspective in order to maintain stable rates and sufficient reserves. Before a financial plan can be developed for the Township’s system, an analysis of the system’s customer base must be completed. The Township’s wastewater customer base defines the number of accounts, units, and wastewater usage that can be charged to generate revenues to fund the net revenue requirement.

Section 3 CUSTOMERS AND USAGE

Robbinsville Retail Customers and Usage

Each time a customer connects to Robbinsville’s sewer system, it is assigned an Equivalent Dwelling Unit (EDU). Single family homes are assigned one EDU, and all other customer EDUs are established by dividing the total number of estimated gallons per day allocated to the customer by 300 gallons per day. For example, if a restaurant is estimated to use 15,000 gallons of water per day, it would be assigned 50 EDUs (15,000 / 300 = 50).

Robbinsville Township serves about 7,300 retail (i.e., homes and businesses) wastewater EDUs. The Township’s current rate structure includes an annual charge for all sewer units.

The latest available information for NewGen’s study was actual FY 2019 customer data. NewGen did not include any increase in the number of retail customers in its study forecast, therefore the number of EDUs remains the same in each year of NewGen’s forecast. The Township’s sewer rate structure is simple and easy to understand. It is also easy for the Township to administer and generates a large proportion of fixed revenue.

Alternative Rate Structure

As a part of the study, Robbinsville requested an evaluation of a potential alternative rate structure that would include a fixed annual fee for all customers, but also a variable rate for non-residential customers based on monthly water demand. NewGen was provided non-residential account and water usage information for FY 2020 to develop this potential alternative. Table 3-1 shows the customer base under this alternative rate structure.

**Table 3-1
Alternative Sewer Rate Structure Customer Base**

Customer Class	Amount
Residential Units	6,211
Non-Residential Units	1,112
Non-Residential Billable Usage (1,000 gal.)	276,665

Section 4 details specific rates that would be needed under this structure to generate sufficient revenue for Robbinsville’s system.

Section 4 FINANCIAL PLAN AND RECOMMENDED RATES

Financial Projections Under Current Rates

NewGen developed cash flow and cash balance projections assuming the revenue requirements detailed in Section 2 of this report, the customer base described in Section 3, and an assumption that the Township does not increase its wastewater rates. This establishes a baseline projection to which rate increase scenarios can be compared. The Township’s FY 2021 rates are summarized below.

FY 2021 Rates

As mentioned previously, the Township’s rate structure includes an annual charge per EDU. The units are based on the water consumption of Non-Residential customers.

Table 4-1 shows the Township’s FY 2021 sewer rates.

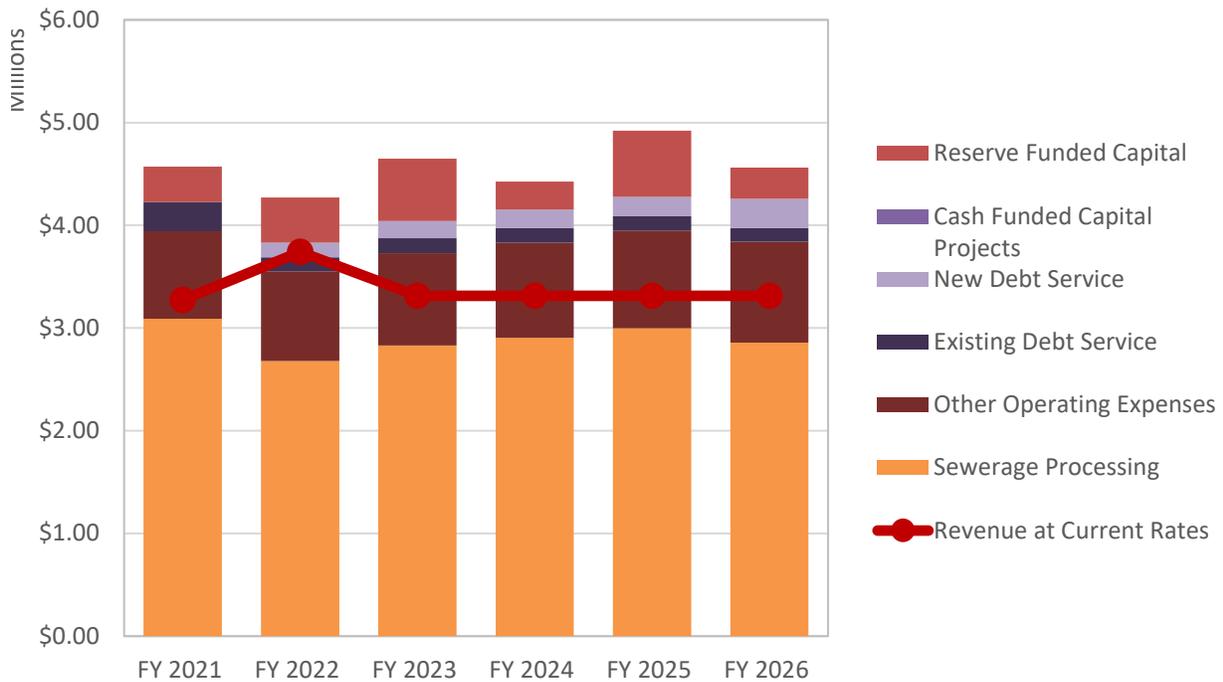
Table 4-1
Robbinsville Township FY 2021 Sewer Rates

Customer Class	Annual Fee per EDU
All Classes	\$425

Cash Flow and Fund Balance Projections Under FY 2021 Rates

Given the Township’s Capital Reserve balance and the planned capital investment included in the five-year CIP, the revenue generated by Robbinsville’s FY 2021 rates alone cannot sustain the Township’s annual wastewater revenue requirements in any of the next five fiscal years (FY 2022 – FY 2026). The expenses shown in the following charts include the projected operating, existing debt, new debt, and cash funded capital projects discussed in Section 2 of this report. The projected revenues assume that the Township does not increase sewer rates in any fiscal year. The projected revenues and expenses are shown in Exhibit 4-2.

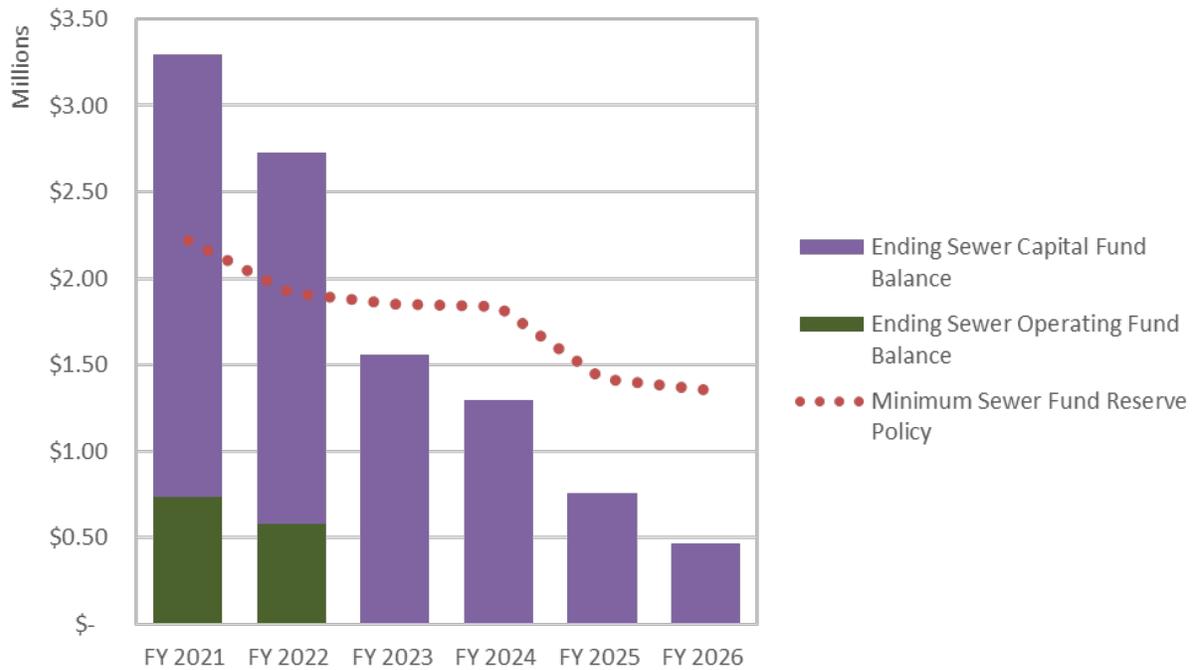
Exhibit 4-2 Expenses vs. Revenues Under Current FY 2021 Rates



As of December 31, 2020, the Township’s Sewer Capital and Operating fund cash balances totaled \$15.72 million. If the Township were not to raise rates in any of the next five years, then current reserves would need to be relied upon to support the wastewater system’s capital plan. However, the projected cash deficits would exhaust the wastewater utility’s capital and operating cash balances by FY 2024 as shown in Exhibit 4-3.

Section 4

Exhibit 4-3 Projected Wastewater Fund Cash Balance Projection Under Current FY 2021 Rates



The current revenues generated by the Township's FY 2021 sewer rates and the Township's Wastewater Fund cash reserves cannot support the projected operating, capital, debt service, and reserve requirements of the wastewater system. Rate increases over that time period are necessary to increase revenues so that the Township's wastewater operating and capital needs are met and the Township maintains adequate Sewer Fund reserves.

Based on the expenses projected in Section 2 of this report, the Township's wastewater customers and usage detailed in Section 3, and the Township's FY 2021 wastewater rates detailed previously in this section, NewGen's rate study has determined that revenue increases are necessary to sustain the Township's wastewater system. A key focus of the study is the impact any revenue increases will have on customers.

Recommended Revenue Increases

In order to increase revenues that will sustain the Township’s wastewater system, NewGen recommends increases to the Township’s sewer rates as shown in Table 4-4.

**Table 4-4
Recommended Sewer Rate Increases**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Rate Increase	0.0%	25.0%	3.0%	3.0%	3.0%	3.0%
FY Month Effective	N/A	July	July	July	July	July
Resulting Cash Flow						
Beginning Fund Balance	\$4,631,704	\$3,296,335	\$3,114,565	\$2,578,083	\$2,381,790	\$1,812,231
Operating Income / (Loss)	(\$991,619)	\$258,531	\$68,618	\$77,445	\$73,548	\$218,036
Use of Reserves	(\$343,750)	(\$440,300)	(\$605,100)	(\$273,738)	(\$643,107)	(\$227,942)
Ending Fund Balance	\$3,296,335	\$3,114,565	\$2,578,083	\$2,381,790	\$1,812,231	\$1,802,325
Minimum Required Balance	\$2,221,869	\$1,914,675	\$1,852,587	\$1,839,359	\$1,418,093	\$1,356,002

NewGen’s forecast assumes that the Township adopt rates effective July 1 each fiscal year.

Assuming that the Township increase its wastewater revenues consistent with the table above, the result is that the Township is able to fund the system’s projected operating, capital, and debt service expenses while also maintaining the recommended reserves.

Recommended Rates

To generate the recommended revenues stated above, Robbinsville must adopt either the recommended rates under the current rate structure or the alternative rate structure.

Current Rate Structure

If the Township were to not change the retail sewer rate structure, then the following rates shown in Table 4-5 are forecasted to fully support the future operating, capital, debt service, and reserve requirements of the system.

**Table 4-5
Recommended Robbinsville Sewer Rates – Current Structure**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Annual Fee per EDU	\$425	\$531	\$547	\$564	\$581	\$598

Section 4

Alternative Rate Structure

The alternative rate structure would maintain the Residential fee at FY 2021 levels and generate additional revenue from the alternative Non-Residential fees, as shown in Table 4-6.

Table 4-6
Recommended Robbinsville Sewer Rates – Alternative Structure

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Annual Residential fee per EDU	\$425	\$425	\$479	\$494	\$508	\$524
Annual Non-Residential Fee per EDU	\$425	\$120	\$135	\$139	\$143	\$147
Usage Rate per 1,000 Gallons	N/A	\$1.44	\$1.63	\$1.67	\$1.72	\$1.78

The table above assumes Robbinsville generates 25% of Non-Residential revenues through the fixed annual fee per EDU, and 75% of revenues from the usage rate per 1,000 gallons.

Customer Bill Impacts

The following Table 4-7 shows the impact on a single family residential bill of adopting the rate increases under the current rate structure. Due to the rate being effective on July 1 each fiscal year, the impact in the first year of the effective rate is half of the rate increase. The next fiscal year results in a full year of the increased rate.

Table 4-7
Projected Annual Customer Bills – Current Rate Structure

Sample Customer	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential	\$425.00	\$478.00	\$539.00	\$555.00	\$571.50	\$588.50
	<i>\$ Change</i>	<i>\$53.00</i>	<i>\$61.00</i>	<i>\$16.00</i>	<i>\$16.50</i>	<i>\$17.00</i>
	<i>% Change</i>	<i>12.47%</i>	<i>12.76%</i>	<i>2.97%</i>	<i>2.97%</i>	<i>2.97%</i>

The following Table 4-8 shows the impact on a single family residential bill of adopting the rate increases and adopting the alternative rate structure. Due to the rate being effective on July 1 each fiscal year, the impact in the first year of the effective rate is half of the rate increase. The next fiscal year results in a full year of the increased rate.

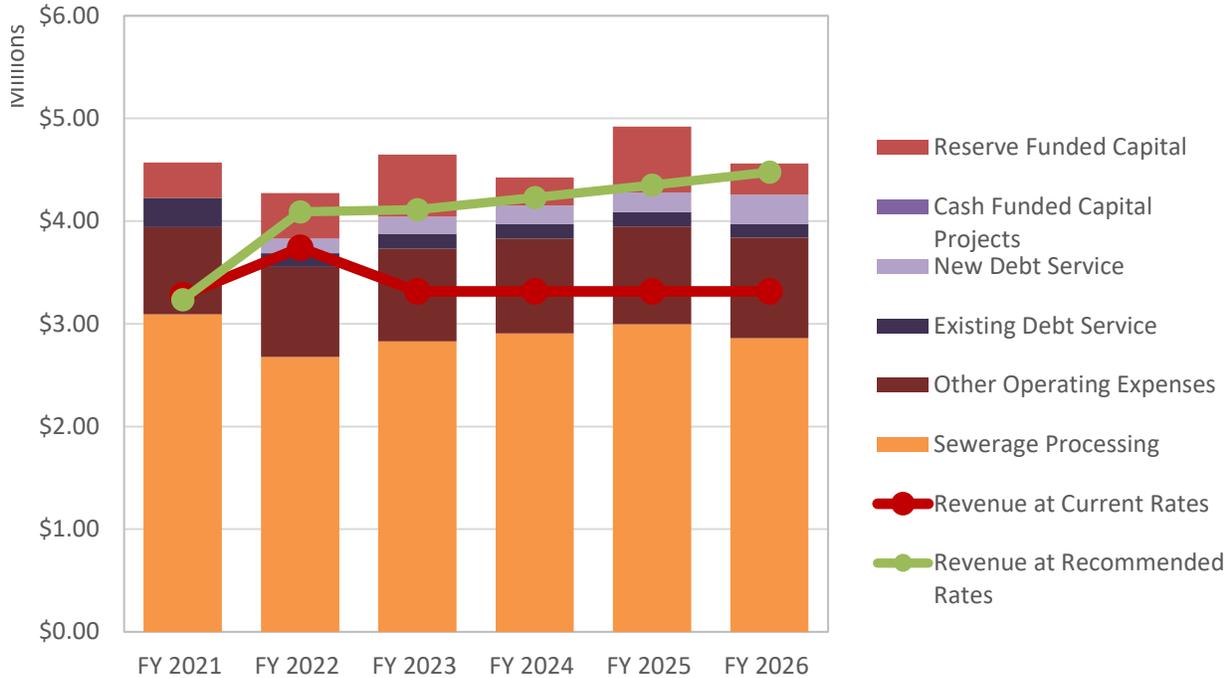
Table 4-8
Projected Annual Customer Bills – Alternative Rate Structure

Sample Customer	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential	\$425.00	\$425.00	\$452.00	\$486.00	\$500.50	\$515.50
	<i>\$ Change</i>	<i>\$0.00</i>	<i>\$27.00</i>	<i>\$34.00</i>	<i>\$14.50</i>	<i>\$15.00</i>
	<i>% Change</i>	<i>0.00%</i>	<i>6.35%</i>	<i>7.52%</i>	<i>2.98%</i>	<i>3.00%</i>

Cash Flow Under Recommended Revenue Increases

Assuming that the Township increases rates consistent with the financial plan in Table 4-5. Exhibit 4-9 shows the projected expenses and revenues under the proposed revenue increase plan.

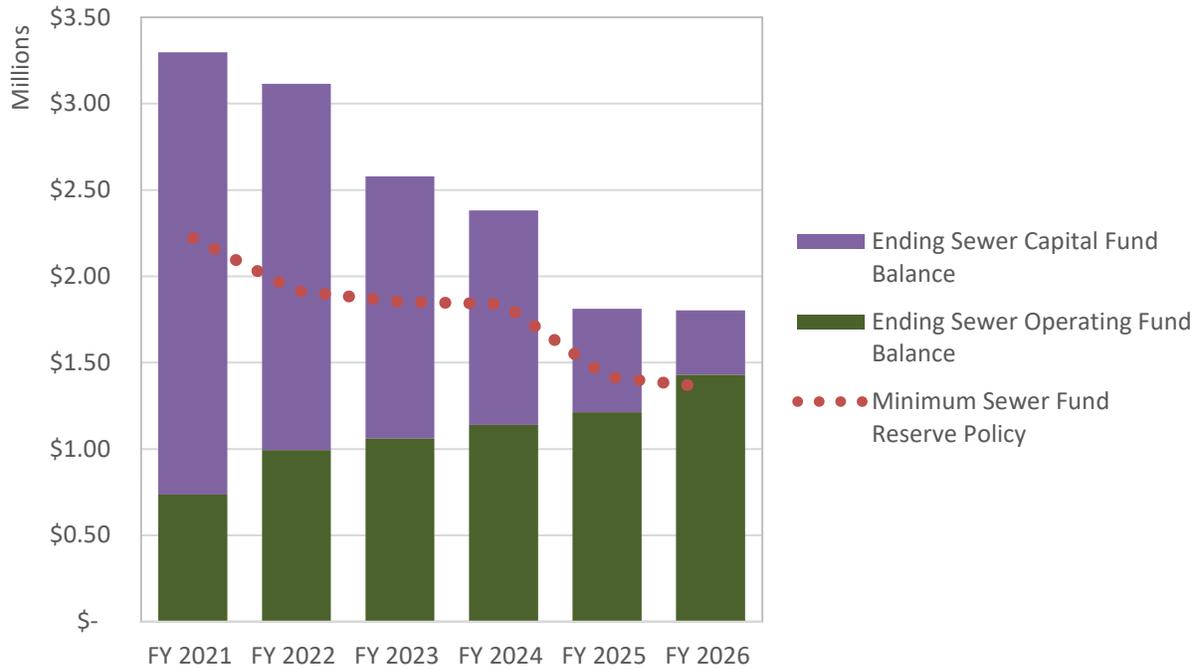
Exhibit 4-9 Expenses vs. Revenues Under Recommended Rate Increases



Although the revenues projected in FY 2022 do not fully fund the annual revenue requirement in most years, the Township’s Sewer Capital Fund reserves are sufficient to support the system as revenues are increases incrementally over the five year projection. Exhibit 4-10 shows the Township’s projected cash balances of the Township’ Sewer Operating and Sewer Capital Fund under the recommended rate increases.

Section 4

Exhibit 4-10 Projected Wastewater Utility Cash Balance Under Recommended Rates

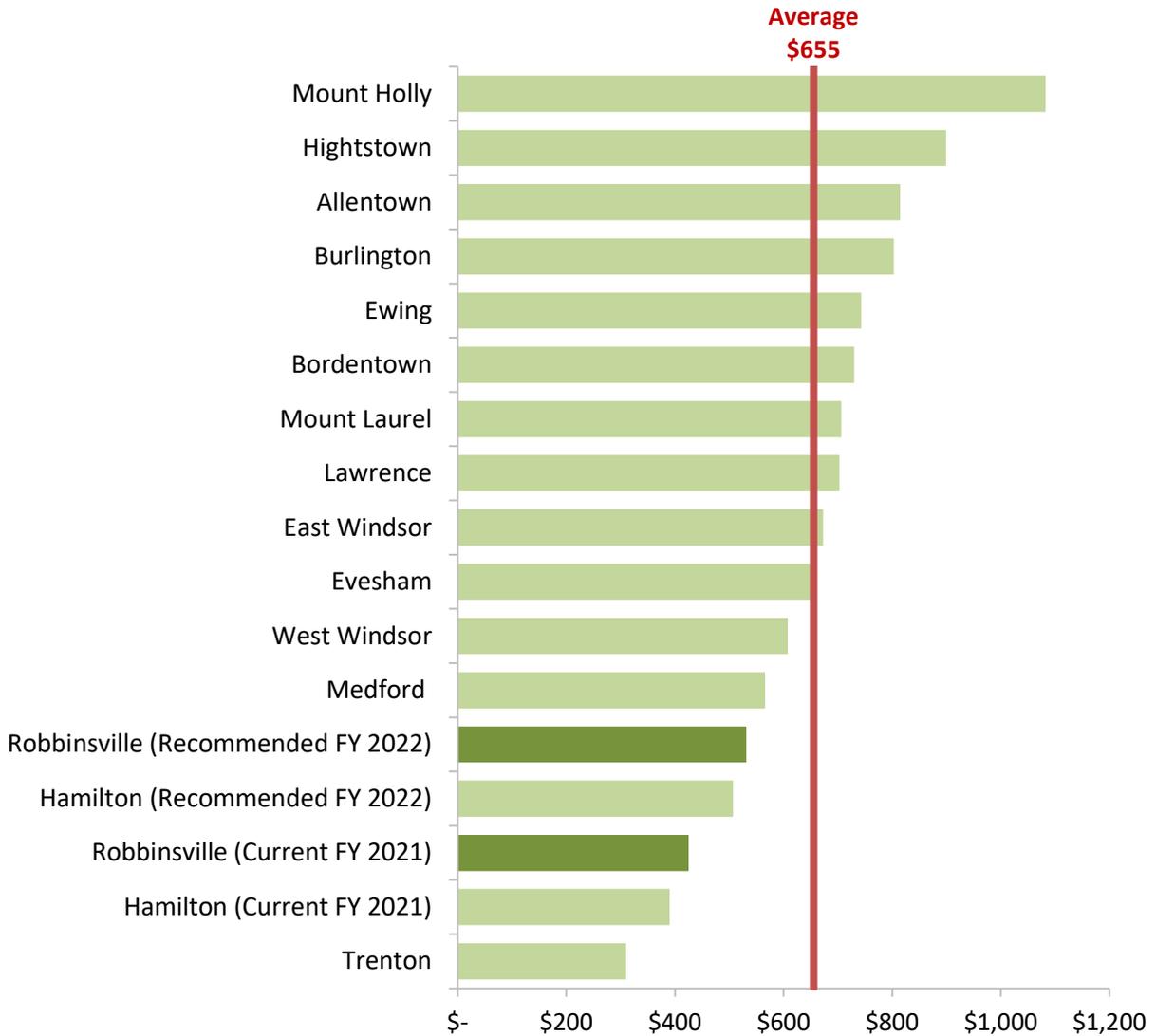


The Township's Sewer Capital and Sewer Operating reserves can support the system during the revenue increase phase in period of FY 2022 through FY 2025.

Section 5 REGIONAL BILL COMPARISON

The following exhibit shows a comparative bill for a Single Family Residential customer in surrounding wastewater service areas. This assumes Robbinsville does not change its rate structure.

Exhibit 5-1 Sample Single Family Annual Bill



While regional comparisons may provide some context, the ranking of individual customer bills is not a consideration when developing a financial plan and rate structure. The Township’s cash needs are independent of the rates in the surrounding jurisdictions, and this comparison is provided for information only.

Section 6 FINDINGS AND RECOMMENDATIONS

Below are the findings and recommendations resulting from NewGen’s sewer rate study for the Township of Robbinsville.

Findings

- The Township’s wastewater system is well managed financially and operationally.
- The Township’s planned capital spending is appropriate for the size and value of the Township’s system and reflects a sufficient level of investment in the Township’s wastewater infrastructure.
- The Township’s FY 2021 sewer rates are not adequate to fully fund the future operating, capital, and reserve requirements of the Township’s system.

Recommendations

Based on the above stated findings, NewGen recommends several items to address the necessary revenue increases needed to support the Township’s wastewater system.

- Adopt the rates shown in the following table, effective July 1 each fiscal year:

**Table 6-1
Recommended Robbinsville Sewer Rates**

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Rate Increase	0.0%	25.0%	3.0%	3.0%	3.0%	3.0%
FY Month Effective		July	July	July	July	July
Annual Fee per EDU	\$425	\$531	\$547	\$564	\$581	\$598

- Re-evaluate the financing plan for the Township’s CIP and update the forecasted rate impact each fiscal year.



THANK YOU!



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