City of Stuart, Florida
Water, Wastewater and Sanitation Rate Study

Prepared on: August 14, 2017

Prepared by: Public Resources Management Group, Inc.

Study Objectives

- Develop a funding strategy to pay for system operations and capital repairs & upgrades, including replacement of sanitation vehicles
- Estimate revenue requirements to be recovered from user rates
- Identify the need for future rate increases, if any

Study Considerations

- Increasing revenues from customer and sales growth
- Increasing operating expenses due to additional service demands from customer growth and estimated inflation
- Increased capital expenditures to maintain, rehabilitate and replace water and wastewater lines, lift stations, and other facilities, and the replacement of the sanitation fleet over time (10-year replacement cycle)
- Assumes the City will issue additional debt to help finance certain capital costs over a period of time
  - Strategy allows for the phasing-in of projected rate increases over the study period

Major Study Assumptions / Criteria

- Revenues at existing rates are projected to increase approximately 1% per year on average
  - Includes infill in the existing sewer basins and proposed expansion into six (6) additional sewer basins with 531 possible connections
- Operating expenses anticipated to increase between 2.7% and 3.5% annually for sanitation and water & wastewater systems, respectively
  - Includes $600,000 per year in incremental operating expenses associated with the proposed new water treatment improvements that are phased in from FY20 to FY22
- Study addresses funding of City priority projects including:
  - Public Works' Complex - $4.5 million
  - Water Treatment Plant Improvements - $10.1 million
  - Sewer System Expansion - $767,250 after considering matching grants
  - Large Meter Conversion and Force Main Replacements - $1,275,000

Major Study Assumptions / Criteria (cont.)

- Proposed future water and wastewater debt
  - Series 2018 SRF Loan – Water Treatment Plant Improvements
    - $8.6 million in project costs after using $1.5 million in availability fees
    - 20 years at 2.5% annual interest; 2-years capitalized interest
    - $575,400 annual payment beginning in FY20
  - Series 2018 Bank Loan – Sewer Expansion
    - $767,250 in project costs after considering 50% matching grants
    - 10 years at 3.0% annual interest; 2-years capitalized interest
    - $141,032 annual payment beginning in FY20
  - Series 2018 Bank Loan – Large Meter Conversion & Force Main Replacements
    - $1,275,000 in project costs
    - 10 years at 3.0% annual interest; 2-years capitalized interest
    - $234,341 annual payment beginning in FY20

Major Study Assumptions / Criteria (cont.)

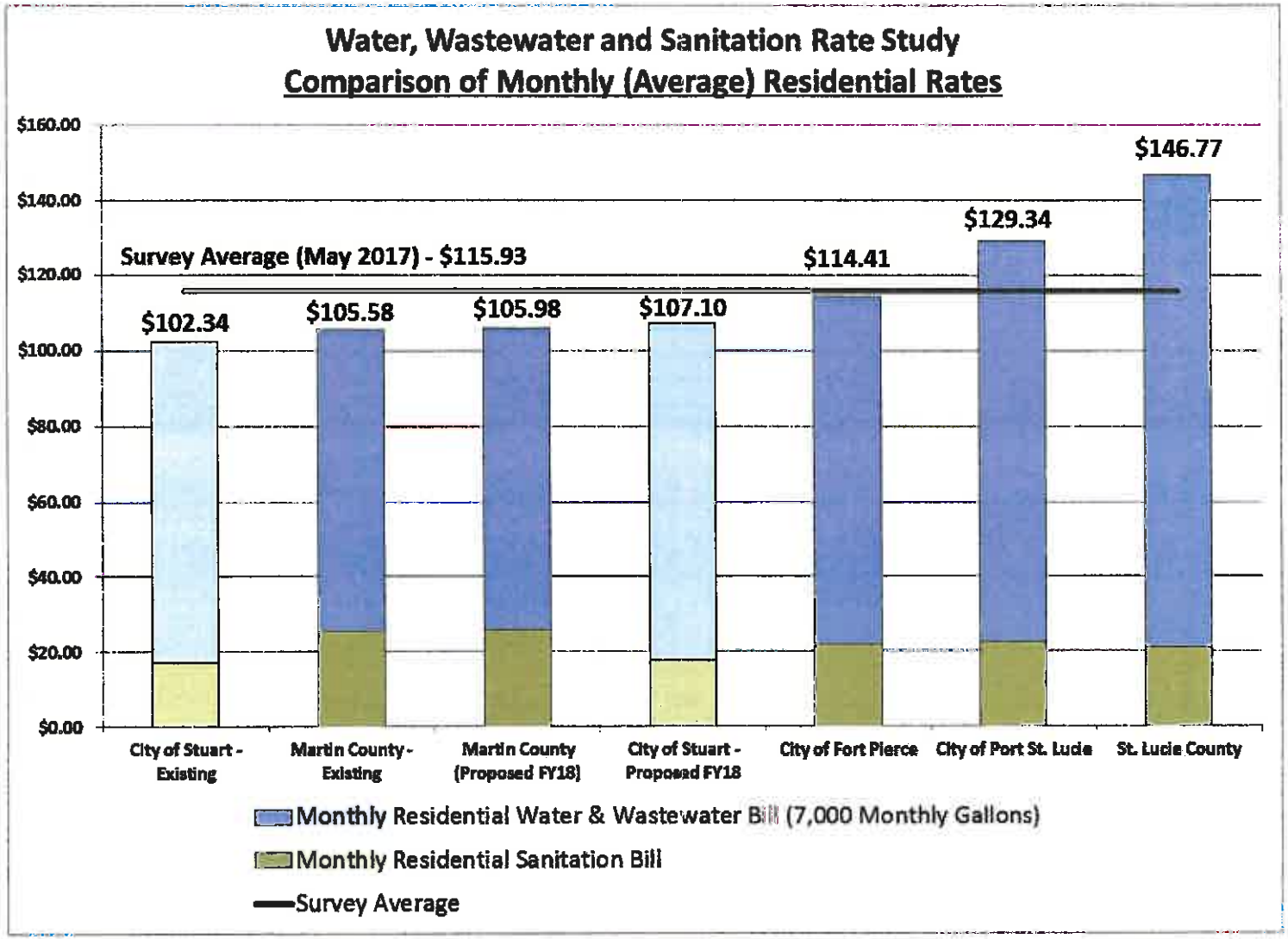
- Proposed future sanitation debt
  - Series 2019 Bank Loan – Public Works' Complex
    - $4.0 million in project costs after using $500,000 in reserves
    - 15 years at 3.5% annual interest; 2-years capitalized interest
    - $423,771 annual payment beginning in FY21
- Maintain minimum operating reserve balances of not less than 25% of the operating expenses or 90 days
- Phase-in projected rate adjustments using reserve balances above the minimum requirement in the short-term while ensuring that revenues are adequate to meet the annual expenditure needs without the use of reserves by FY22

Summary of Proposed Rate Adjustments

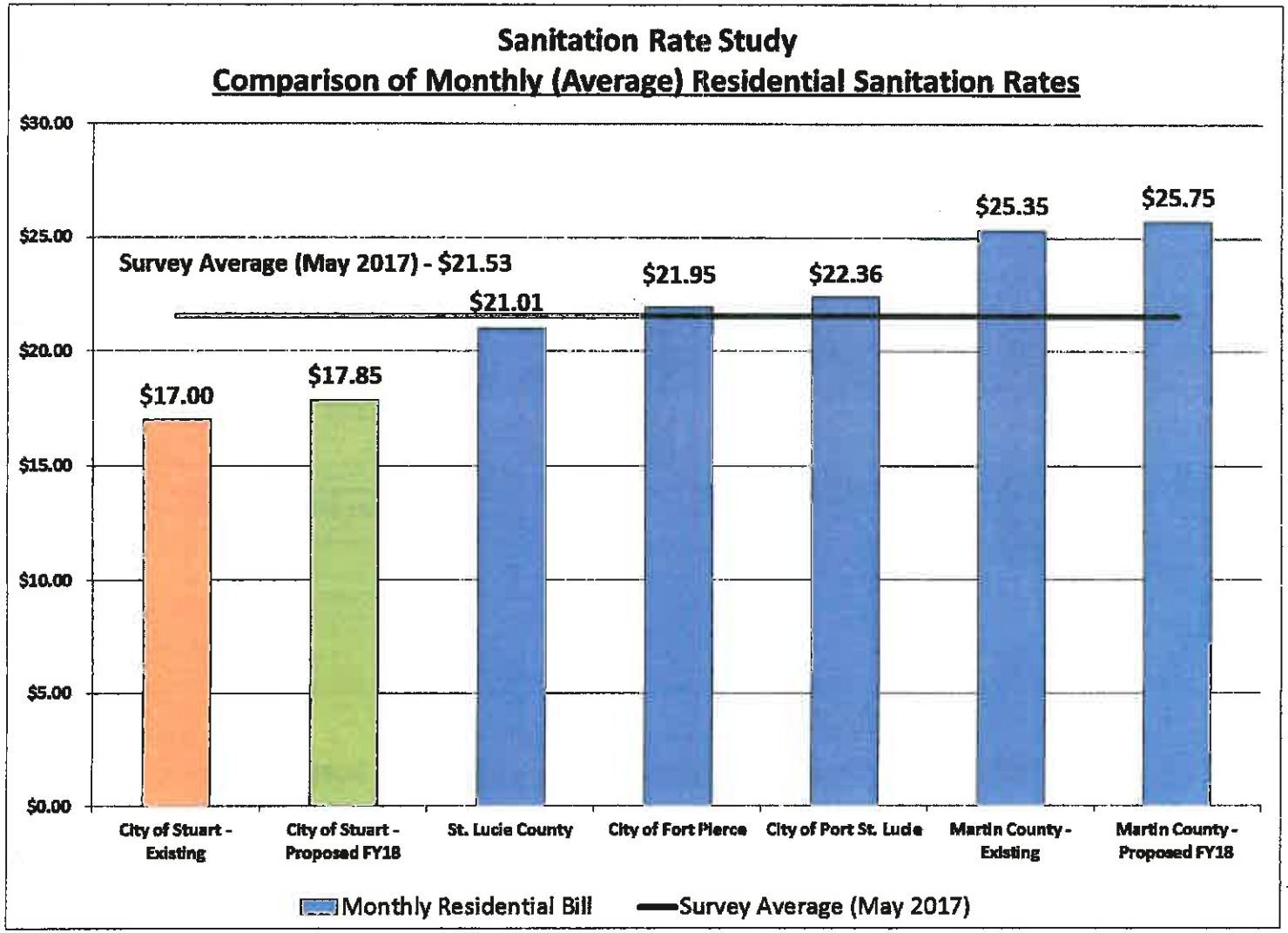
Summary of Proposed Rate Adjustments					
Description	2018	2019	2020	2021	2022
Water System	7%	7%	7%	2%	2%
Wastewater System	3%	3%	3%	2%	2%
Sanitation System	5%	5%	5%	5%	5%

Estimated Residential Bill for Water, Wastewater & Sanitation Services – 7,000 Monthly Gallons						
Description	Existing	2018	2019	2020	2021	2022
Water Bill	$33.13	$35.47	$37.95	$40.60	$41.43	$42.27
Wastewater Bill	$52.21	$53.78	$55.42	$57.07	$58.22	$59.38
Sanitation Bill	$17.00	$17.85	$18.74	$19.68	$20.66	$21.69
Total Bill	$102.34	$107.10	$112.11	$117.35	$120.31	$123.34
Percent Increase		4.7%	4.7%	4.7%	2.5%	2.5%

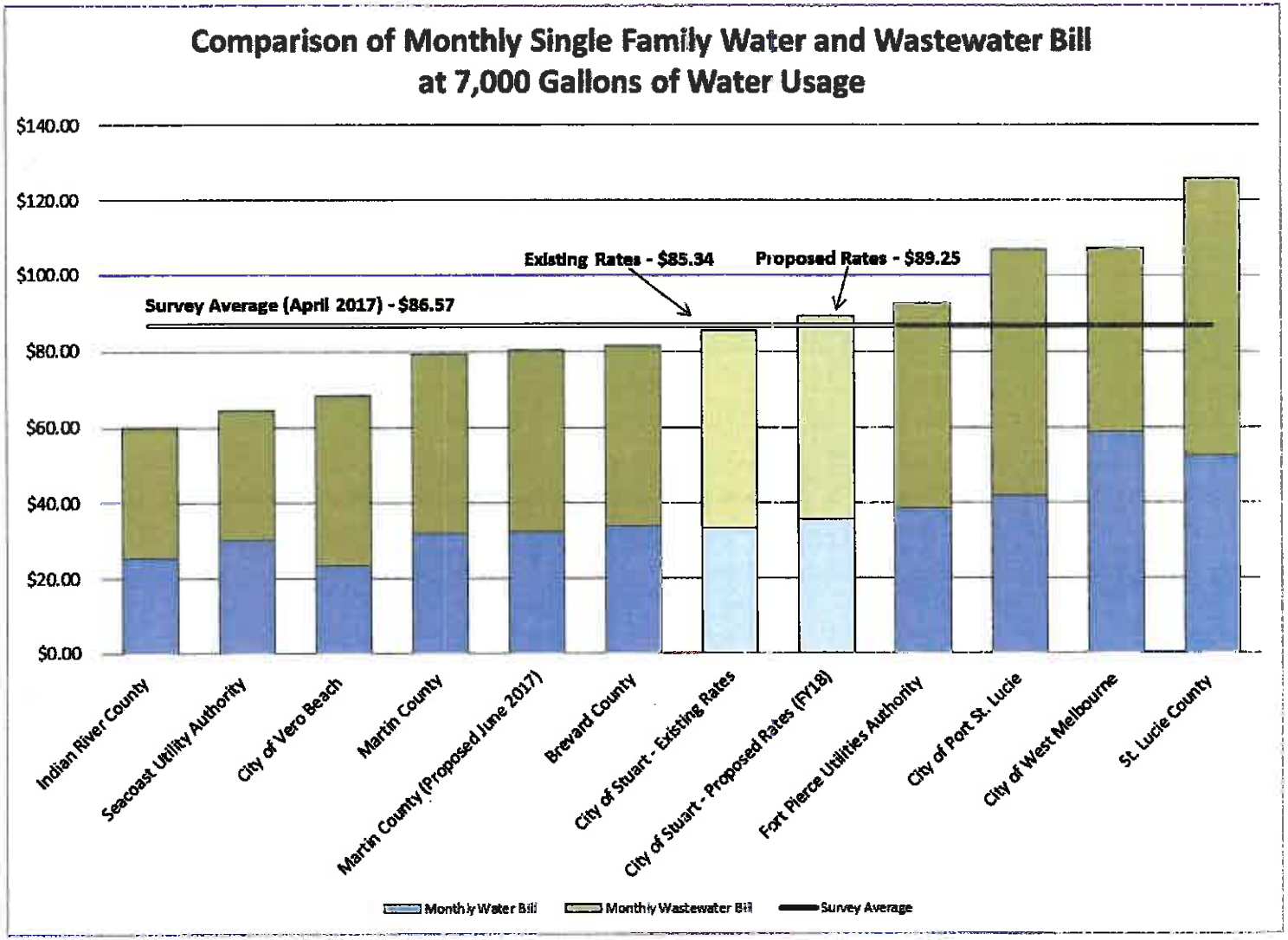
Comparison of Proposed Monthly Residential Bills – Combined FY18



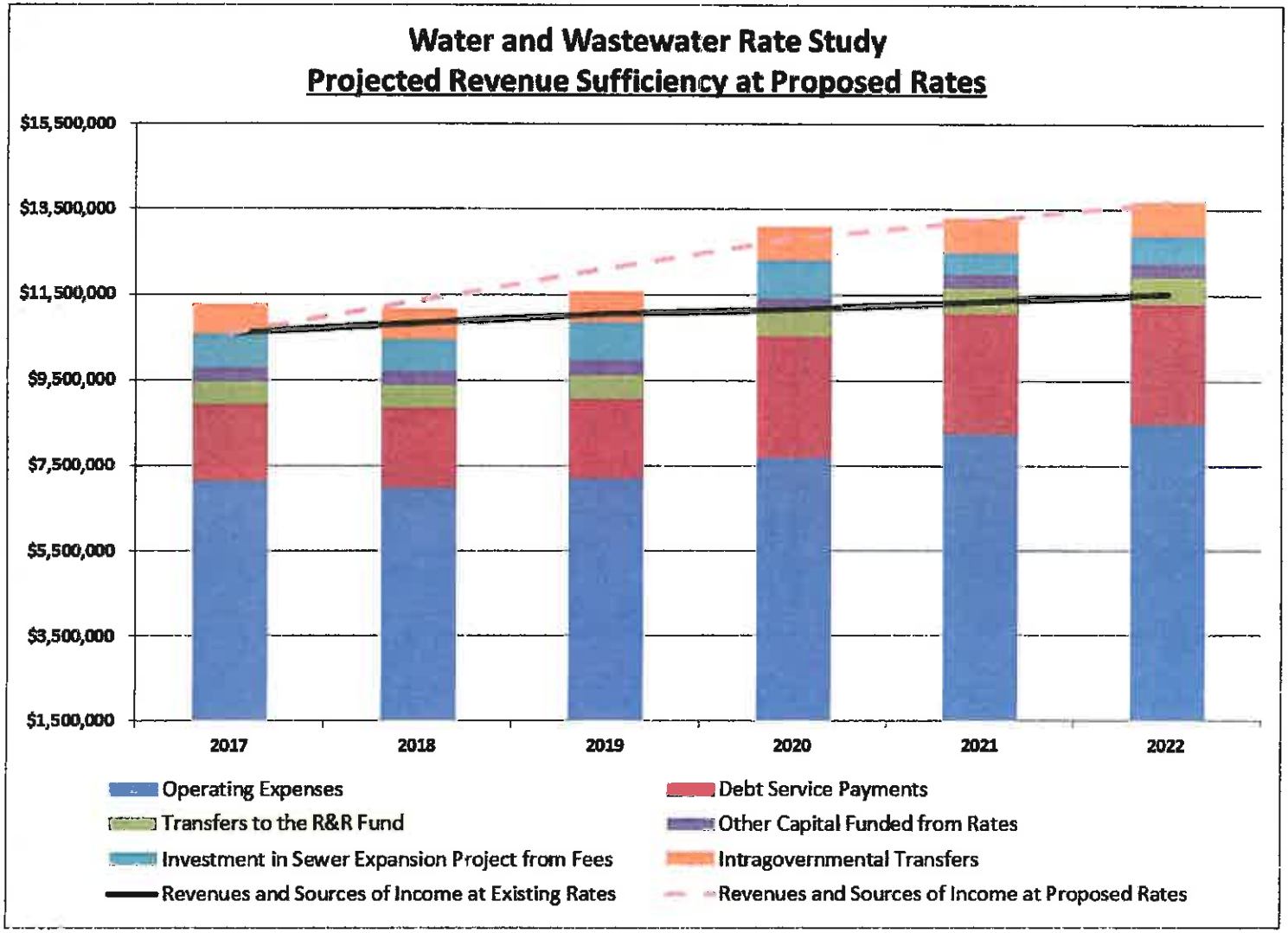
Comparison of Proposed Monthly Sanitation Bills for Residential Service



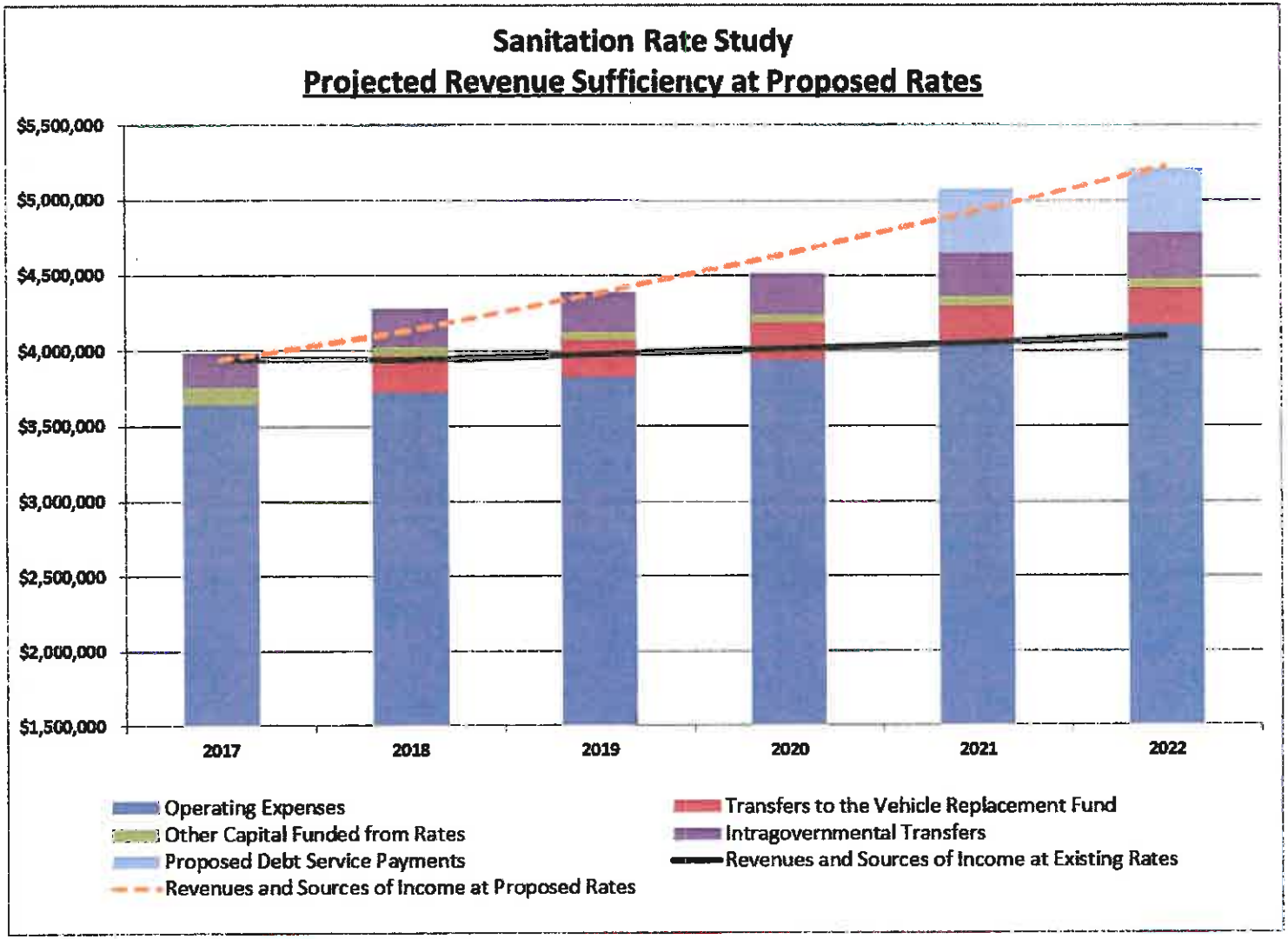
Comparison of Proposed Monthly Water and Wastewater Bills for Residential Service



Projected Adequacy of Proposed Water and Wastewater Rates



Projected Adequacy of Proposed Sanitation Rates



Recommendations & Conclusions

- The City's existing water, wastewater and sanitation rates are not adequate to meet the projected expenditure requirements of each system through FY22
- The City should consider adopting the proposed sanitation, water and wastewater rates as outlined in this study beginning with bills rendered on or after October 1, 2017 and every October 1st thereafter
- The proposed rates are competitive when compared to neighboring utility systems for similar services
- The City should consider updating this study within five years

Discussion & Questions



Supplemental Water, Wastewater and Sanitation Rate Study Information

Major Study Assumptions and Development of Projected Revenue Requirements

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Projection of Revenues

- Projected revenue growth of approximately 1% per year on average
- Includes infill growth in existing sewer basins of approximately 125 connections per year
- Includes expansion into six (6) additional basins with 531 possible connections (400 new connections phased in over 10-years)
  - Based on 50% matching grants and financing the difference through a bank loan over 10-years
- Existing and future sewer expansion fee revenues used to perpetually fund the purchase of new grinder systems as connections are assumed to be made
  - Requires additional funding from user rates over the study period
- Miscellaneous income generally held constant

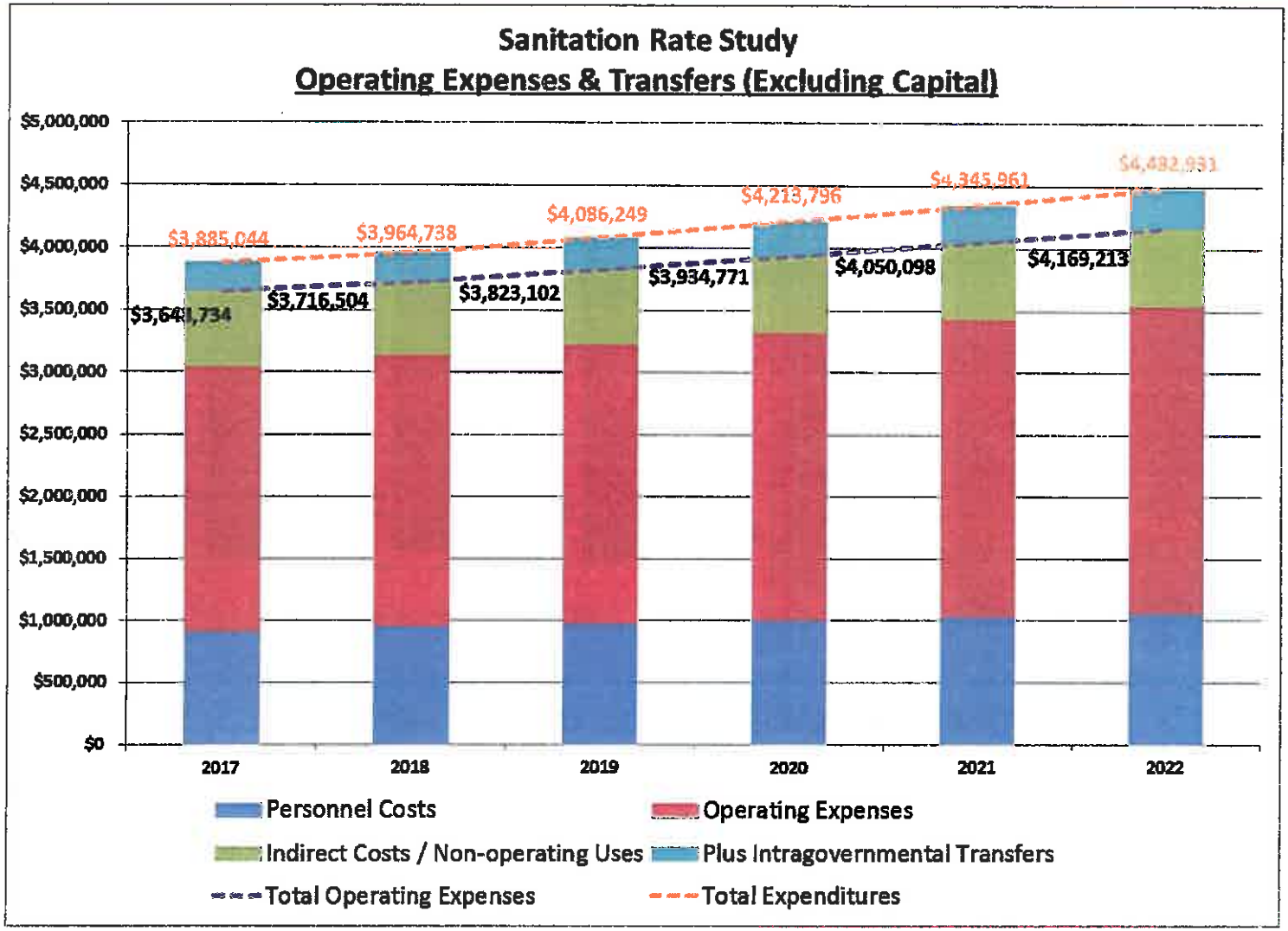
Projection of Operating Expenses

- Based on the Adopted FY17 & Proposed FY18 Budgets
- Expenses increased beyond FY18 as follows:
  - Labor: 2% per year
  - Health Insurance: 6% per year
  - Workers' Compensation & Liability Insurance: 3% per year
  - Utility & Fuel Costs: 5% per year
  - Repairs & Maintenance Expenses: 3% per year
  - All other costs based on CPI or 2.4% per year on average
- Incremental operating expenses assumed based on the water treatment plant improvements beginning in FY20 at $290,000 per year and increasing to $605,000 by FY22

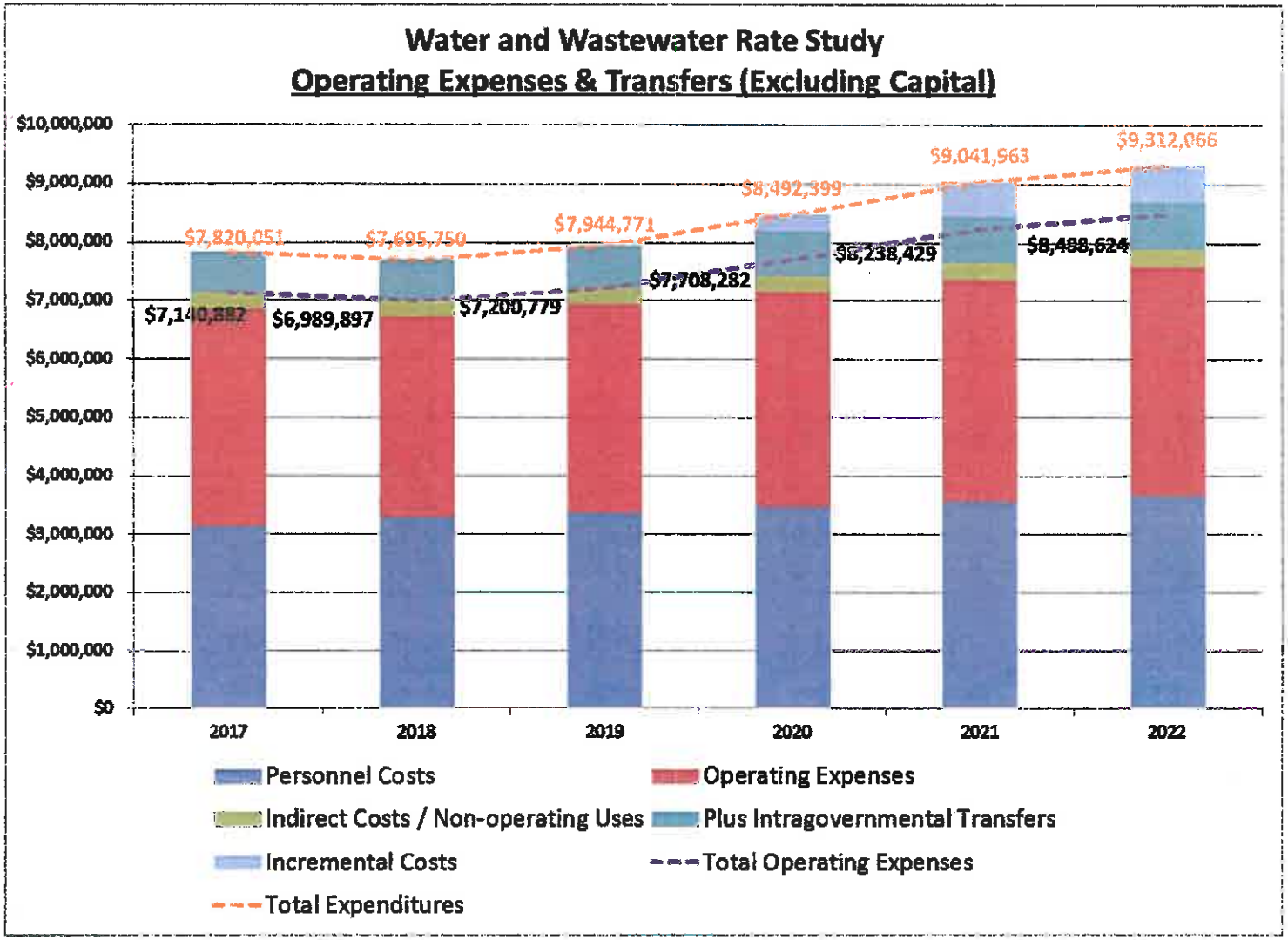
Projection of General Fund Transfers

- Based on the Adopted FY17 and Proposed FY18 Budgets or approximately 6.0% of Gross Revenues
  - Sanitation: $248,000 per year
  - Water and Wastewater: $706,000 per year

Projection of Sanitation Expenses



Projection of Water & Wastewater Expenses



Capital Improvement Program

- Sanitation: $6.1 million through Fiscal Year 2022
  - Includes $4.5 million for Public Works' Complex
  - Primarily includes vehicle replacements
  - Established a Vehicle Replacement Fund with a current balance of $500,000 and funded $250,000 per year from rates based the planned expenditures, which reflect a 10-year replacement horizon
- Water & Wastewater: $27.1 million through Fiscal Year 2022
  - $10.1 million in Water Treatment Plant Improvements
  - $1.5 million in Sewer Expansion Projects (Assumed 50% Matching Grants)
    - $4.8 million in Grinder Systems funded through existing and future sewer expansion fees and user rates when the connections occur
  - $1.2 million in Large Meter Conversions and Force Main Replacements for Monterey Road and Stuart Middle
  - Additional amounts to fund recurring renewals and replacements of other system assets and infrastructure

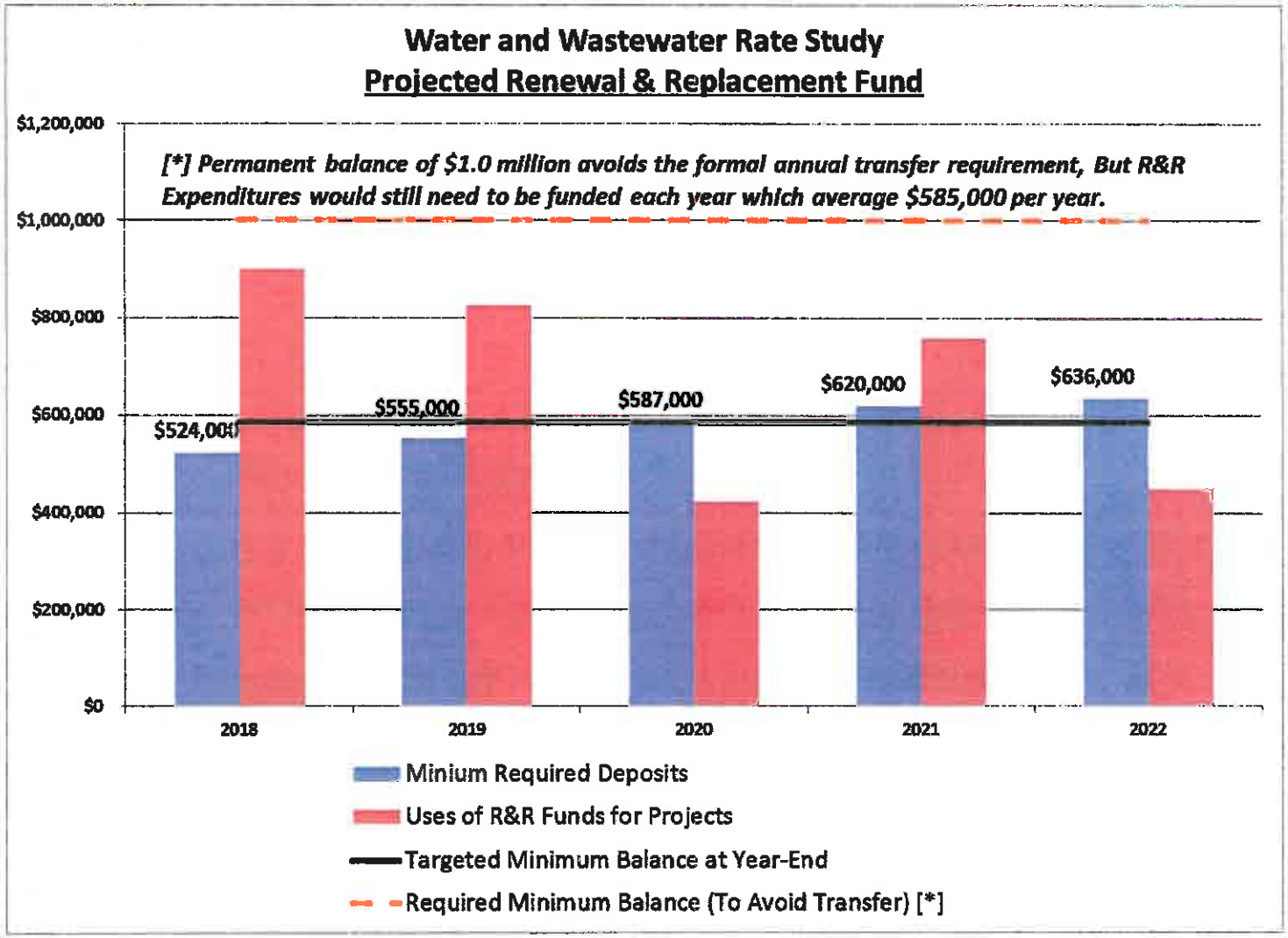
Proposed Debt

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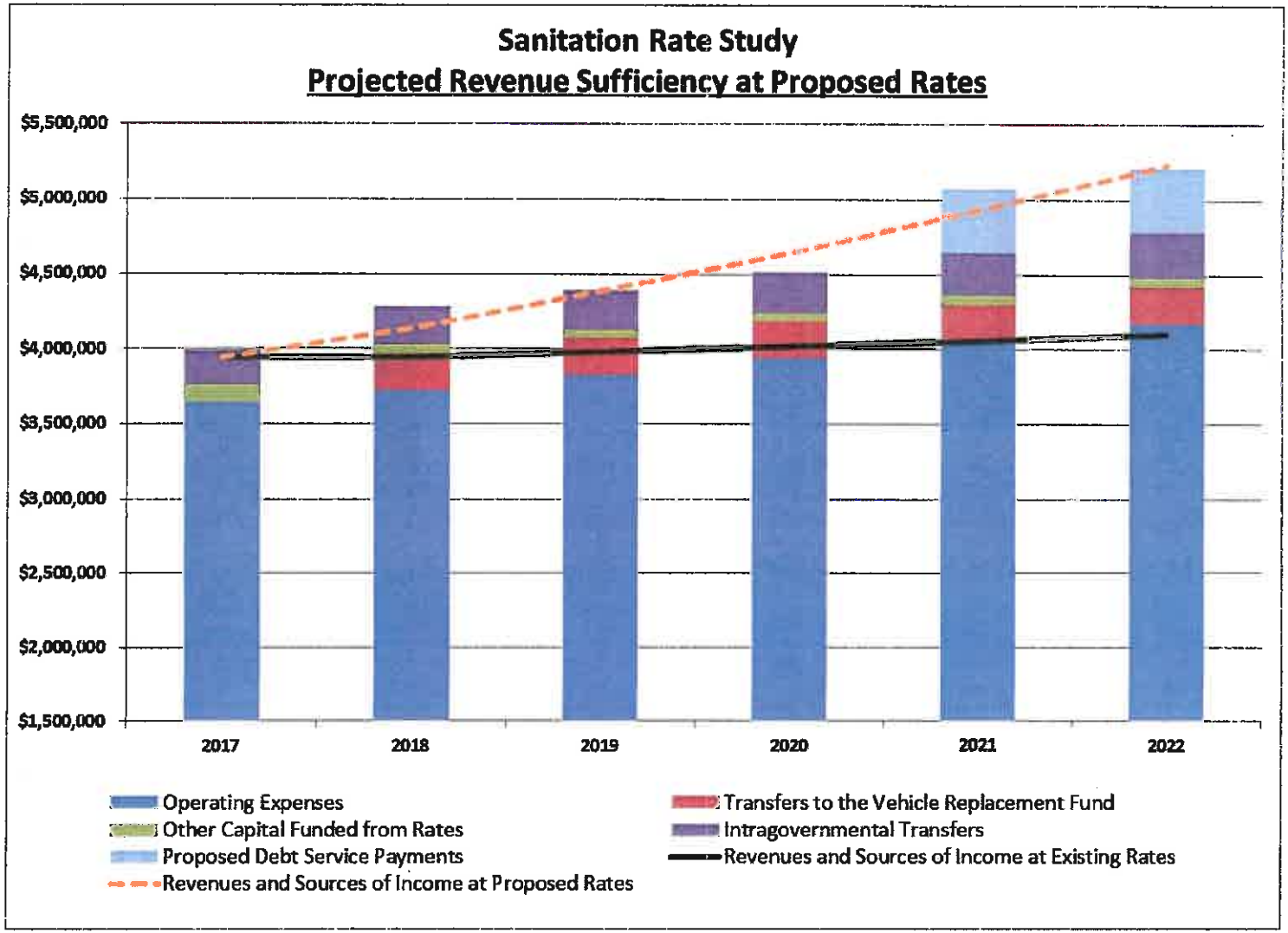
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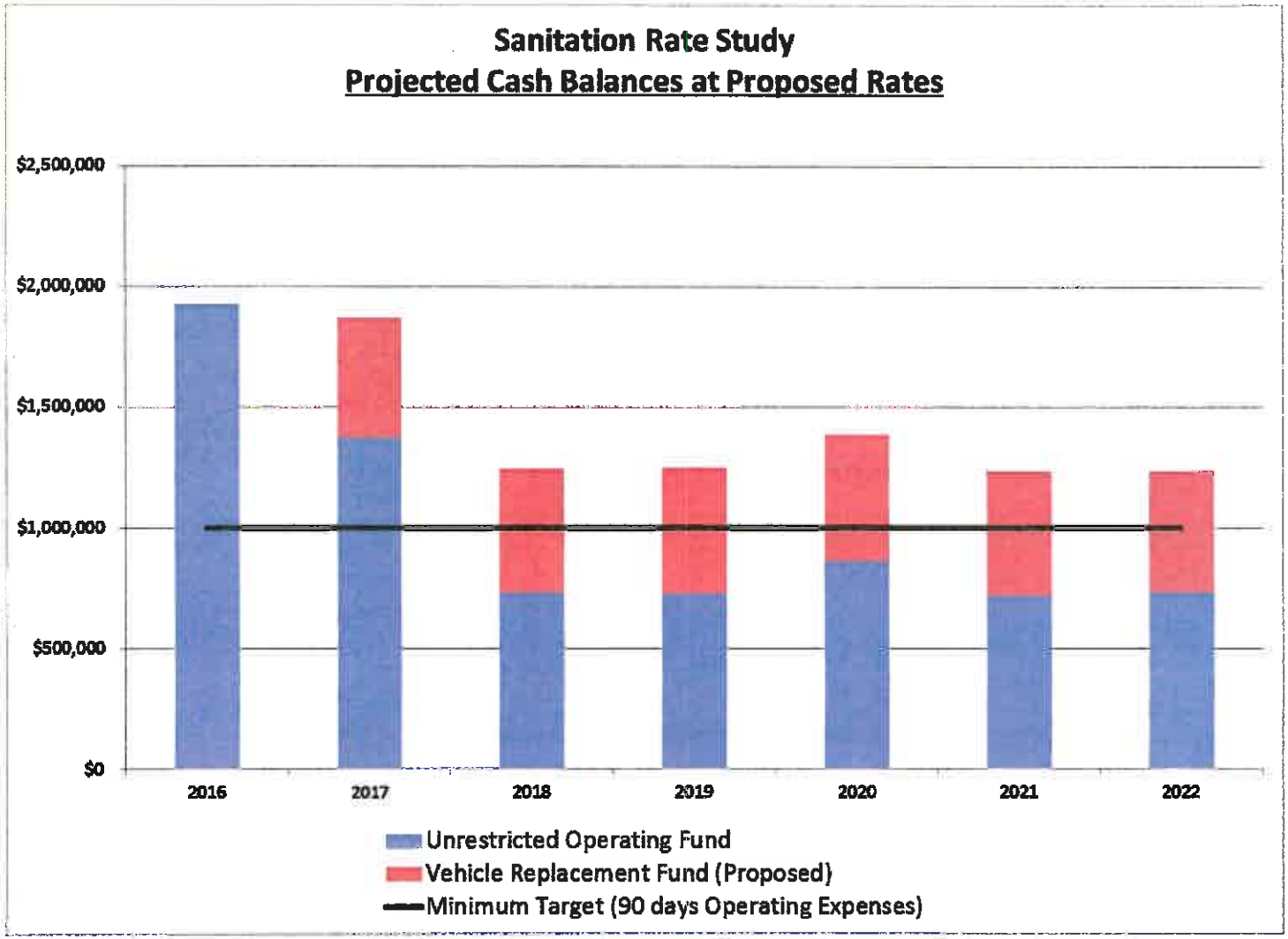
Projection of Water and Wastewater R&R Fund Transfers



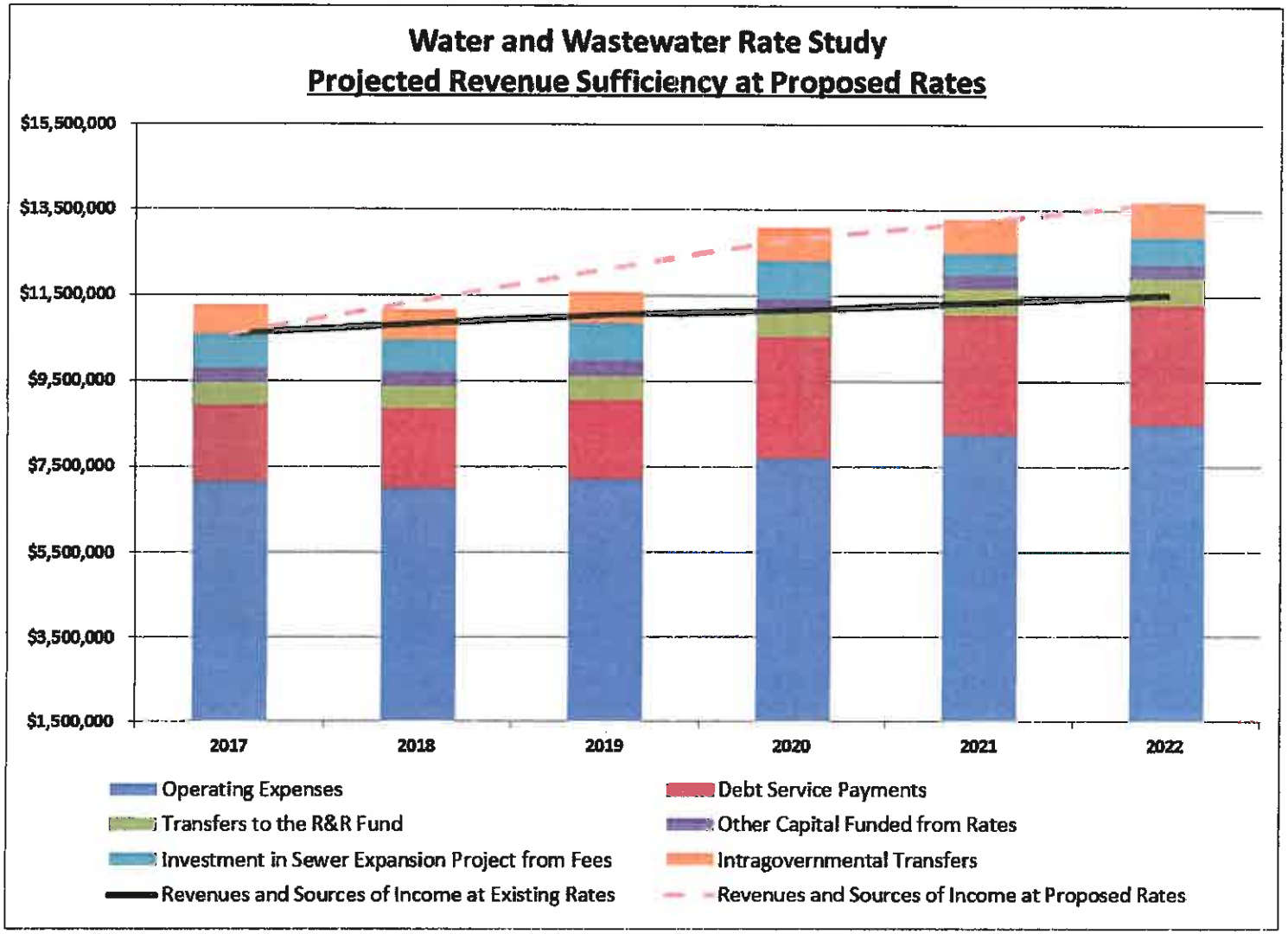
Projected Adequacy of Proposed Sanitation Rates



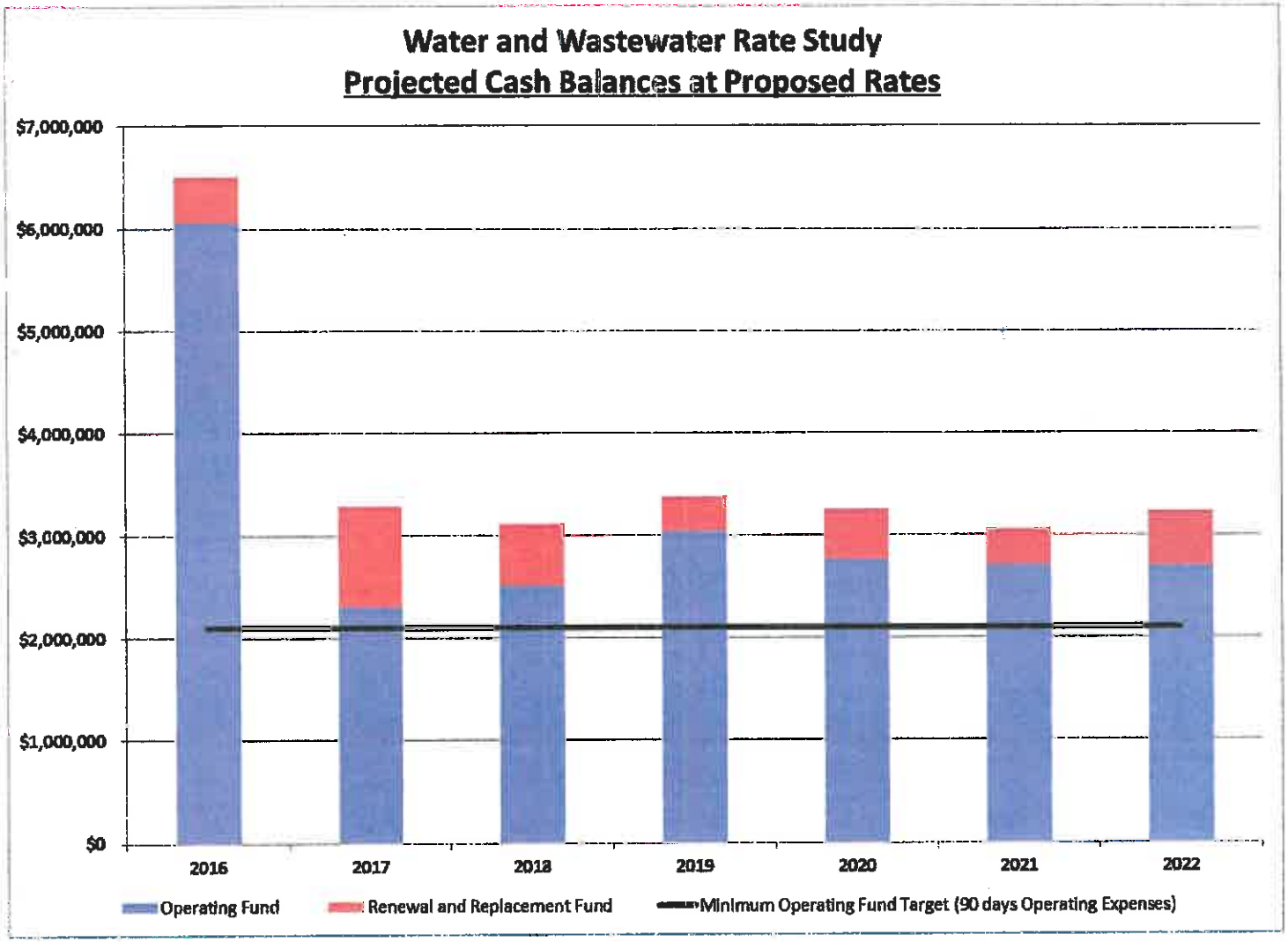
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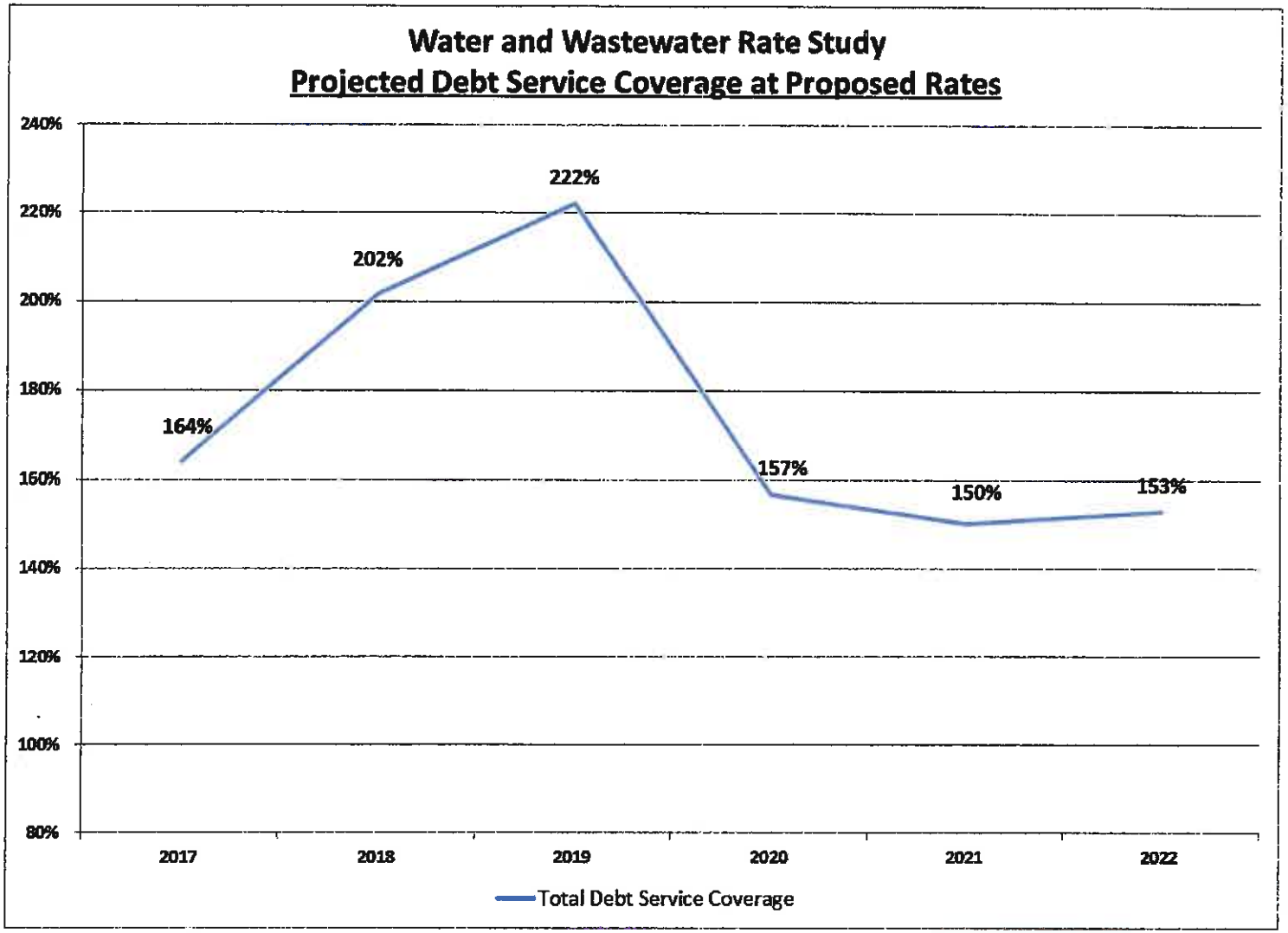
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Appendices

Appendix A – Sanitation Rate Study Tables
Appendix B – Water and Wastewater Rate Study Tables