



# City of Prospect Heights



## Sewer Rate Study Results and Discussion

April 12, 2017

Presented By:

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MFSG



Municipal & Financial  
Services Group



# Agenda



- Firm Qualifications
- Project Background
- Basic Principles of Utility Rate Setting
- Rate Study Results
  - Scenario 1 – Presented on December 12, 2016
  - Scenario 2 – Developed on December 15, 2016
  - Scenario 3 – Developed on April 3, 2017
- Recommended Rates
- Questions / Discussion



# Municipal and Financial Services Group, LLC



- **Founded as an independent consulting practice in 2001, located in Annapolis, MD**
  - Specialized Financial and Management Consulting Practice
  - Focus on the efficient delivery of municipal services
  - National client base
- **Selection of Illinois Clients**
  - Westchester
  - Orland Park
  - Lombard
  - Libertyville
  - Downers Grove
  - Skokie
  - Evanston
  - Moline
  - South Elgin
  - Winnetka
  - Geneva
  - Batavia
  - Morton Grove
  - Wheaton
  - Park Ridge
  - Fox Lake



# Study Background and Purpose



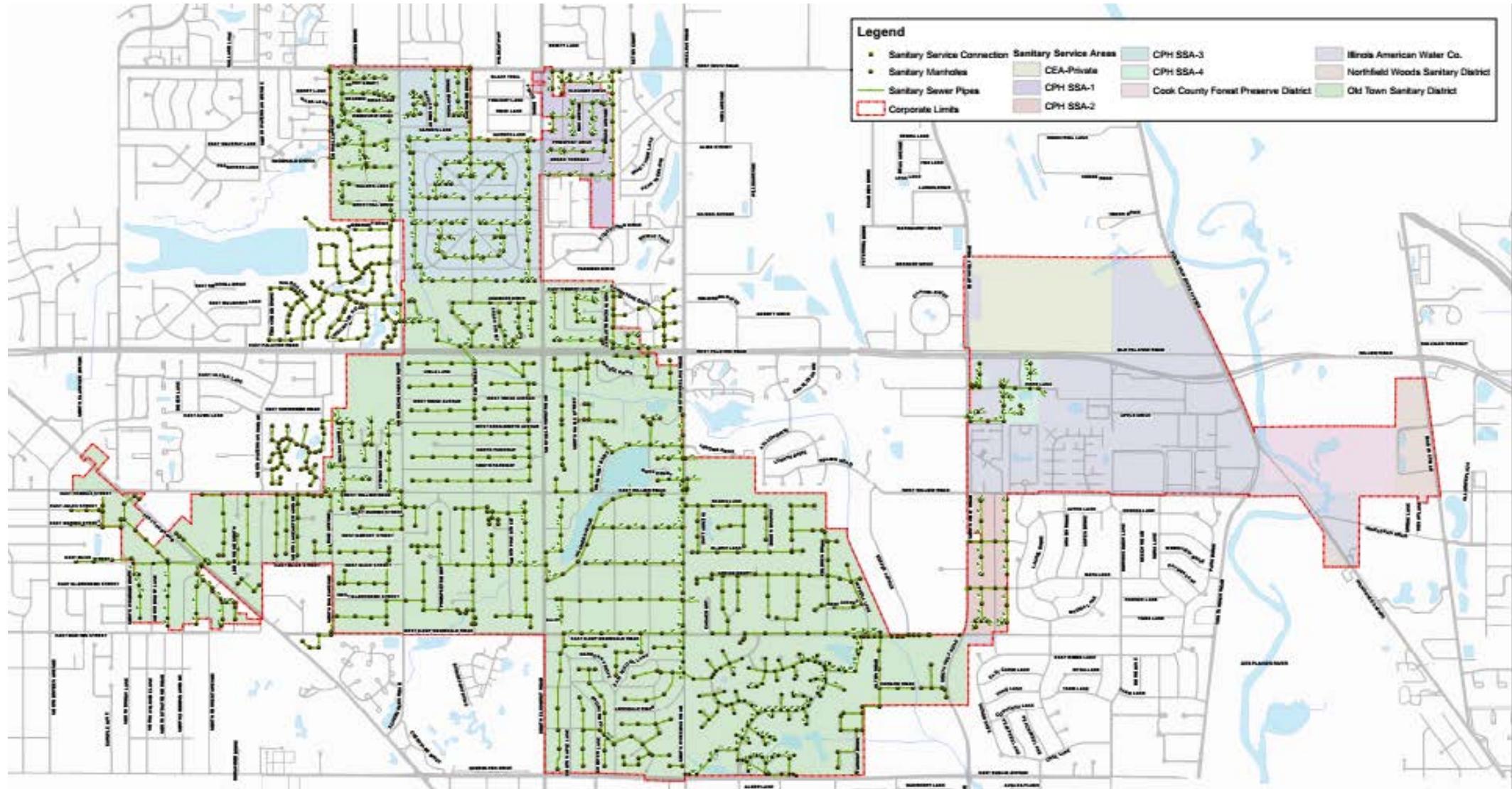
- **Study Background**

- The City's sewer collection system consists of 37 miles of pipe ranging in size from 6" to 18", of which 30 miles belong to the "Old Town" system, which the City acquired in 2015. The system also contains one lift station. The City's collection system drains to the Metropolitan Water Reclamation District of Greater Chicago, to which residents pay a portion of their property taxes to cover treatment costs. Recently, the Metropolitan Water and Reclamation District established new compliance regulations for municipalities regarding inflow and infiltration.

- **Study Purpose / Goals**

- Develop sewer user rates that fully fund the operational, capital, and reserve requirements of the City's collection system.
- Examine the feasibility and impact of grouping all customers under one rate structure, including current Special Service Areas.
- Present the study findings to the City Council and the Public in a clear and understandable way.

# Study Background – City’s Service Area



# Study Background – Inflow and Infiltration

## Sanitary Sewer in Good Condition



## Cracked Sanitary Sewer, allowing Infiltration



Water flowing into sewer pipe



# Basic Principles of Utility Rate Setting



- Sewer Operations are self-supporting
  - ▶ Rates and fees are set to recover cost of providing service
  - ▶ No profit to General Fund
  - ▶ Operations function as a business
  - ▶ Utilities reimburse General Fund for support services (Service Charges)
- Sewer Rates are user fees rather than taxes and therefore are designed to charge customers based on their use of the service.
  - ▶ Three part test for a user fee (Bolt v. City of Lansing, MI) (1988):
    - 1) Must serve a regulatory purpose rather than a revenue-raising purpose; and
    - 2) Must be proportionate to the necessary costs of the service; and
    - 3) Must be voluntary— users must be able to refuse or limit their use of the commodity or services

# Overview of Rate Setting Process

**Step 1 - Identify Revenue Requirements - Cost of Providing Services**

Four Components: Operations, Debt, Capital and Reserves

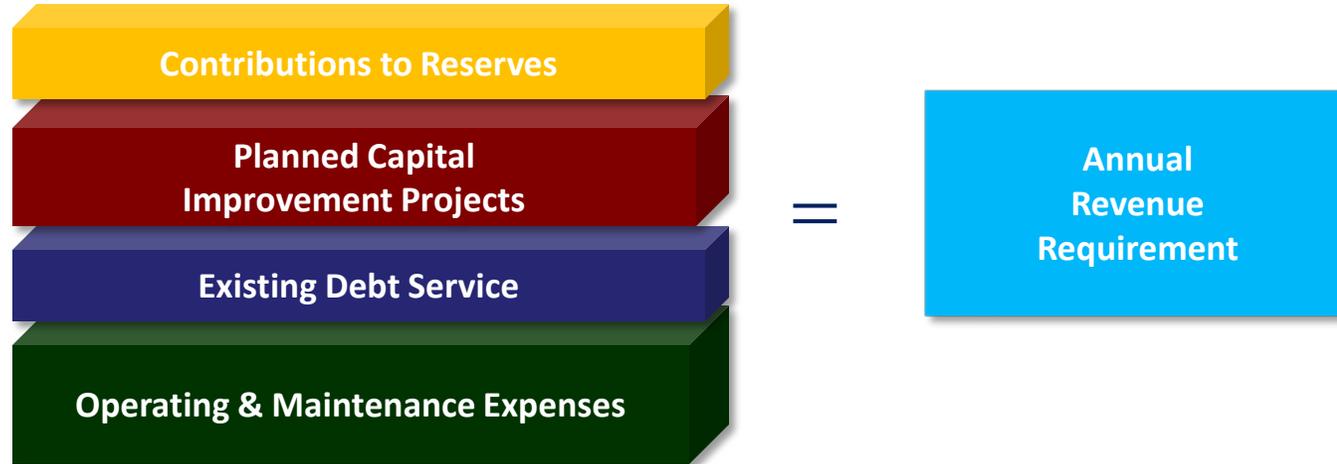
**Step 2 - Allocate Costs Among Customers**

**Step 3 - Design Rate Structure**

**Step 4 - Communication**

**Step 5 – Implementation**

# Basic Outline of Rate Setting Process





# Summary of Basic Rate Setting Principles



- Utility rates should be set to cover the operating and capital expenses of the utility system.
- Sometimes, there is no “right” answer: Town policy can influence which rate structure is used to collect utility fees.
- Customer outreach is important in communicating the need for water and sewer rates to be set appropriately.
- Utility financing is a long term endeavor:
  - Small early increases mitigate the need for large future increases
  - Debt financing distributes costs among current / future users
  - Ultimate Goal – Keep utility rates and fees as low as possible over time.



# Rate Study Results – Scenario 1 (December 12, 2016)

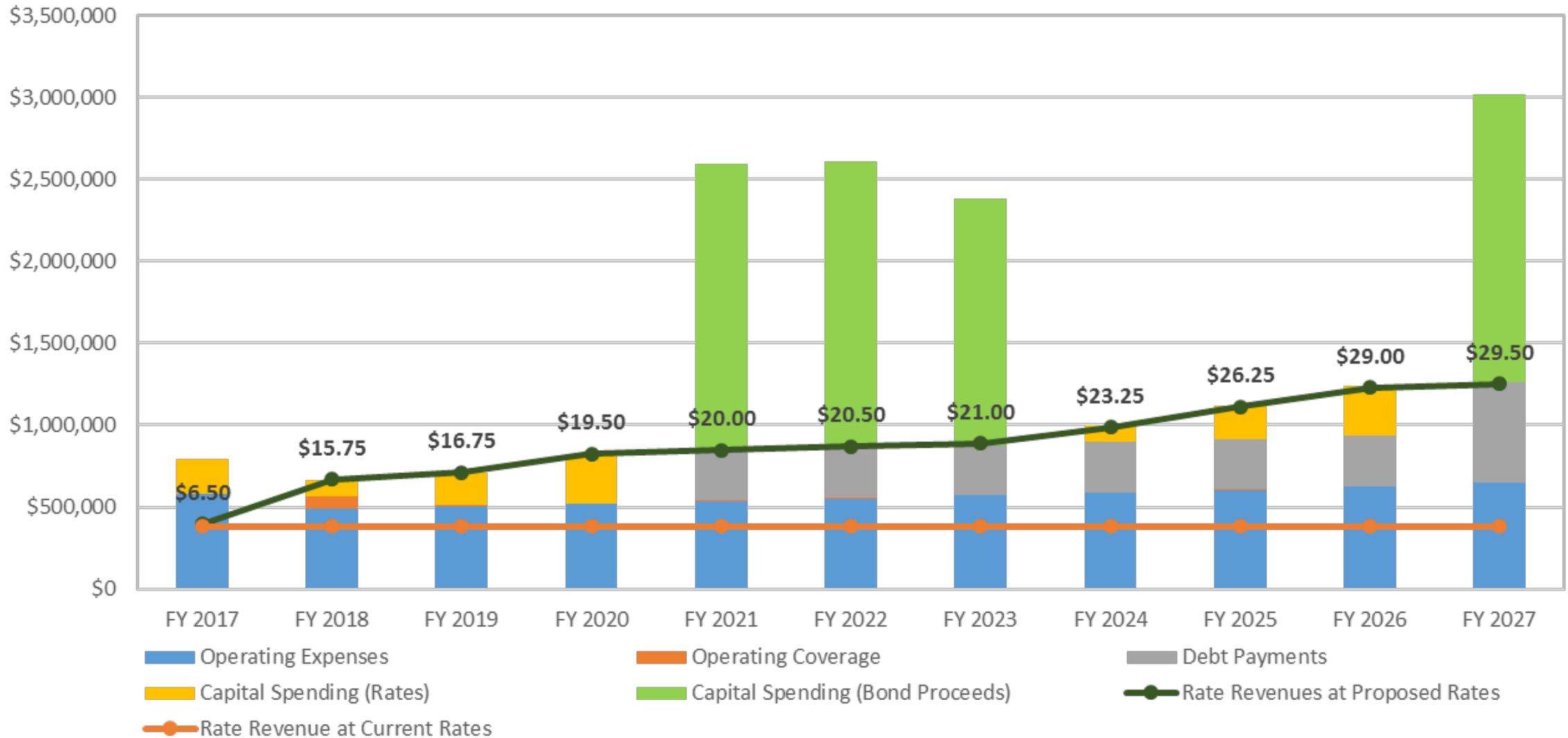


	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Operating Expenses	490,052	505,918	520,603	536,440	552,235
Operating Coverage	73,508	2,380	2,203	2,376	2,369
Debt Payments	-	-	-	305,784	305,784
Capital Spending (Bond Proceeds)	-	-	-	1,750,000	1,750,000
Capital Spending (Rates)	100,000	200,000	300,000	-	-
<b>Total Expenses</b>	<b>\$663,560</b>	<b>\$708,298</b>	<b>\$822,806</b>	<b>\$2,594,600</b>	<b>\$2,610,387</b>
<b>Revenue at Current Rates</b>	<b>\$379,852</b>	<b>\$379,852</b>	<b>\$379,852</b>	<b>\$2,129,852</b>	<b>\$2,129,852</b>
Annual Surplus / (Deficit)	(\$283,708)	(\$328,446)	(\$442,954)	(\$464,747)	(\$480,535)
<b>Revenue at Proposed Rates</b>	<b>\$667,108</b>	<b>\$709,591</b>	<b>\$825,519</b>	<b>\$2,596,159</b>	<b>\$2,618,002</b>
Annual Surplus / (Deficit)	\$3,548	\$1,293	\$2,712	\$1,560	\$7,615

\* Revenue includes use of bond proceeds to support capital spending

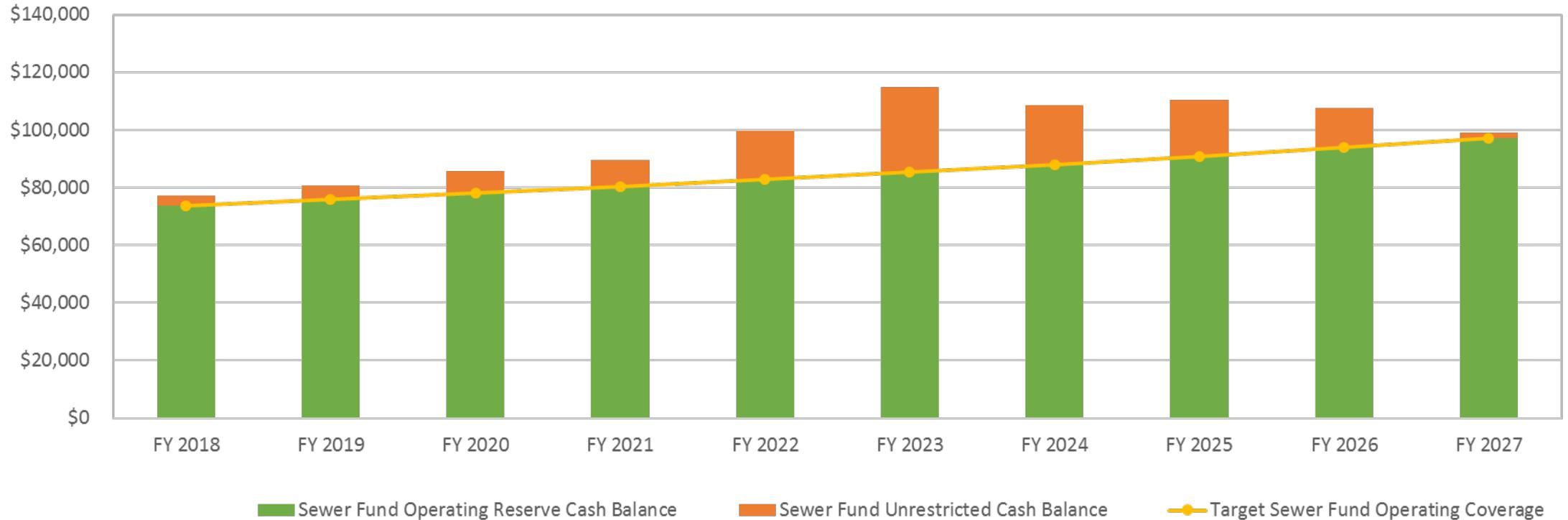
- **What does this projection allow the City to do?**
  - Fully fund the day to day operations and reserve requirements of the sewer collection system
  - Televiser all sewer lines within the next three fiscal years (FY 2018 – FY 2020)
  - Spend \$3.8 million on line replacement from FY 2018 through FY 2022.

# Rate Study Results – Presented on December 12, 2016



# Rate Study Results – Presented on December 12, 2016

Projected End of Year Sewer Fund Balance



(monthly)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Residential Bill	\$15.75	\$16.75	\$19.50	\$20.00	\$20.50	\$21.00	\$23.25	\$26.25	\$29.00	\$29.50
\$ Change	\$9.25	\$1.00	\$2.75	\$0.50	\$0.50	\$0.50	\$2.25	\$3.00	\$2.75	\$0.50



# Rate Study Results – Scenario 2 (December 15, 2016)



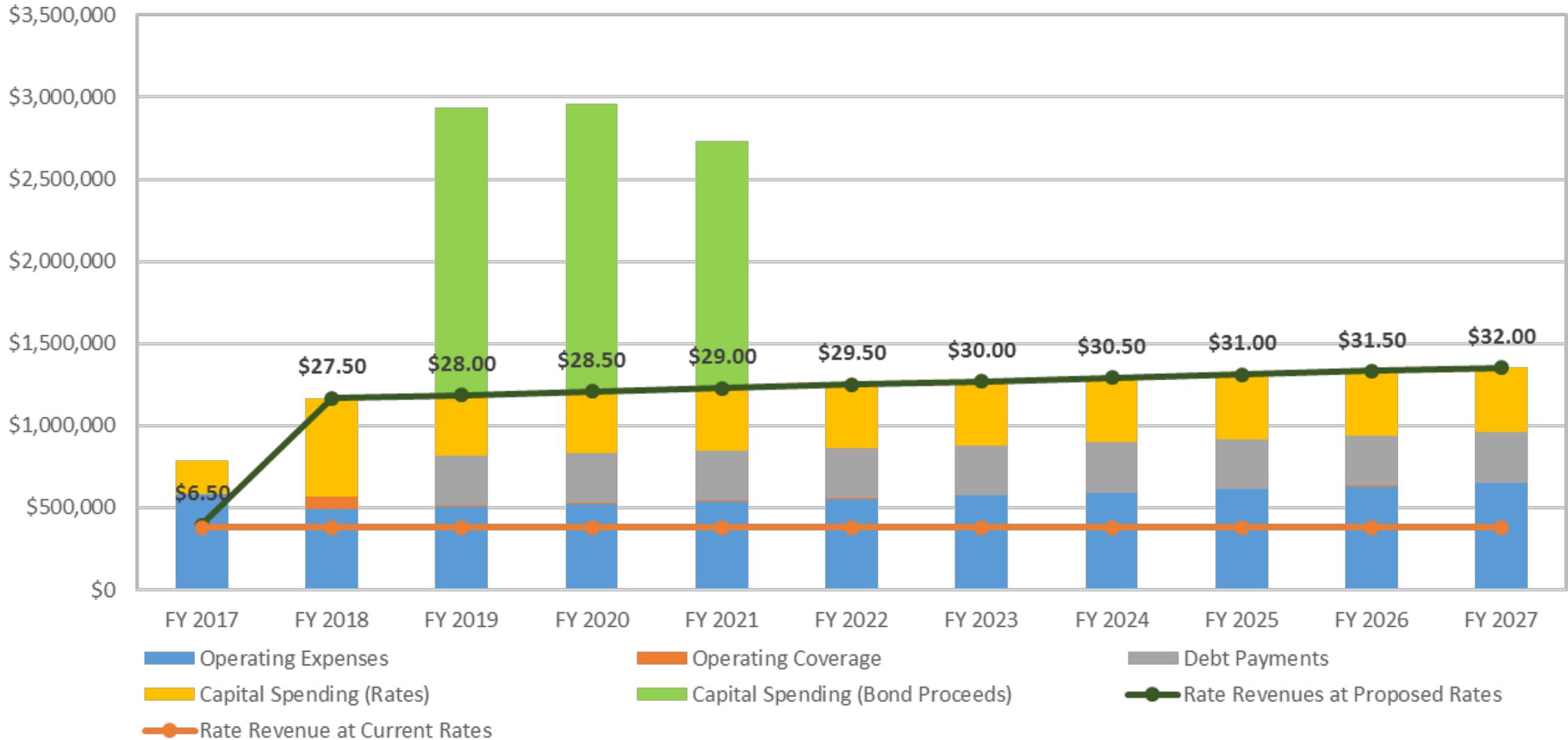
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Operating Expenses	490,052	508,775	523,792	539,412	555,694
Operating Coverage	73,508	2,808	2,253	2,343	2,442
Debt Payments	-	305,784	305,784	305,784	305,784
Capital Spending (Bond Proceeds)	-	1,750,000	1,750,000	1,500,000	-
Capital Spending (Rates)	600,574	370,000	376,000	381,000	385,000
<b>Total Expenses</b>	<b>\$1,164,134</b>	<b>\$2,937,367</b>	<b>\$2,957,828</b>	<b>\$2,728,538</b>	<b>\$1,248,920</b>
<b>Revenue at Current Rates*</b>	<b>\$379,852</b>	<b>\$2,129,852</b>	<b>\$2,129,852</b>	<b>\$1,879,852</b>	<b>\$379,852</b>
Annual Surplus / (Deficit)	(\$784,282)	(\$807,514)	(\$827,976)	(\$848,686)	(\$869,068)
<b>Revenue at Proposed Rates*</b>	<b>\$1,165,385</b>	<b>\$1,187,228</b>	<b>\$1,207,869</b>	<b>\$1,228,509</b>	<b>\$1,249,150</b>
Annual Surplus / (Deficit)	\$1,251	(\$138)	\$40	(\$29)	\$229

\* Revenue includes use of bond proceeds to support capital spending

• **What does this projection allow the City to do?**

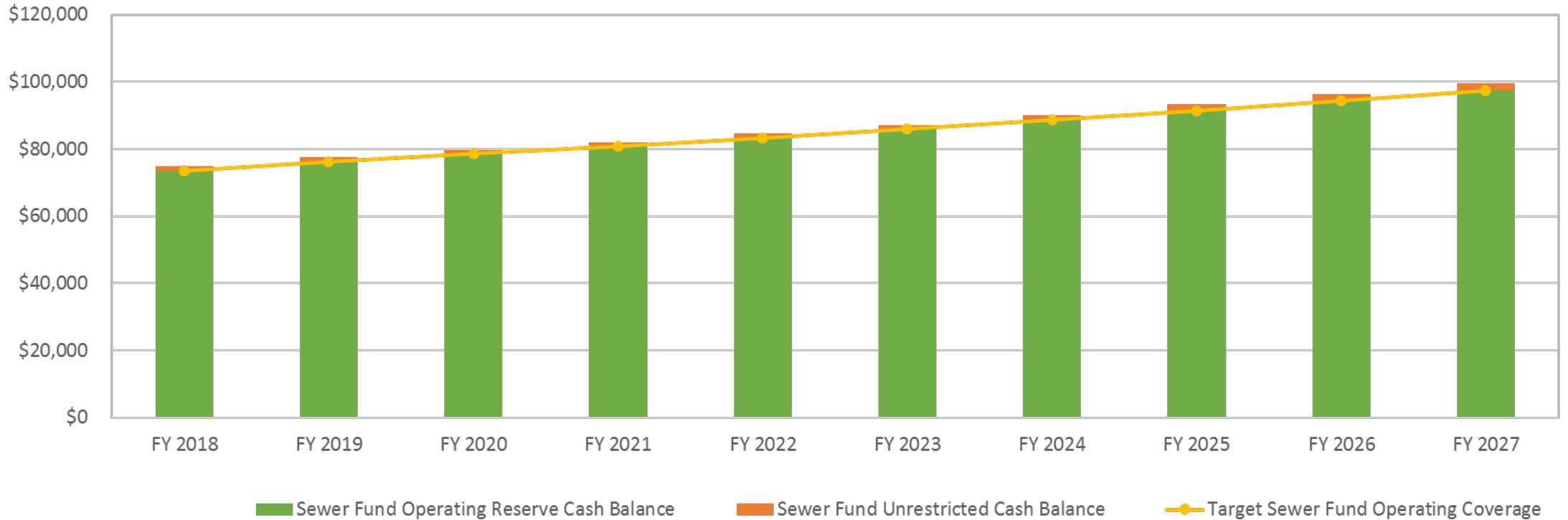
- Fully fund the day to day operations and reserve requirements of the sewer collection system
- **Televising all sewer lines within the next fiscal year (FY 2018)**
- Spend **\$6.8 million** on line replacement from FY 2018 through FY 2022. **(increase of about \$3.0 million)**

# Rate Study Results – Scenario 2 (December 15, 2016)



# Rate Study Results – Scenario 2 (December 15, 2016)

Projected End of Year Sewer Fund Balance



(monthly)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Residential Bill	\$27.50	\$28.00	\$28.50	\$29.00	\$29.50	\$30.00	\$30.50	\$31.00	\$31.50	\$32.00
\$ Change	\$21.00	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50



# Rate Study Results – Scenario 3 (April 3, 2017)

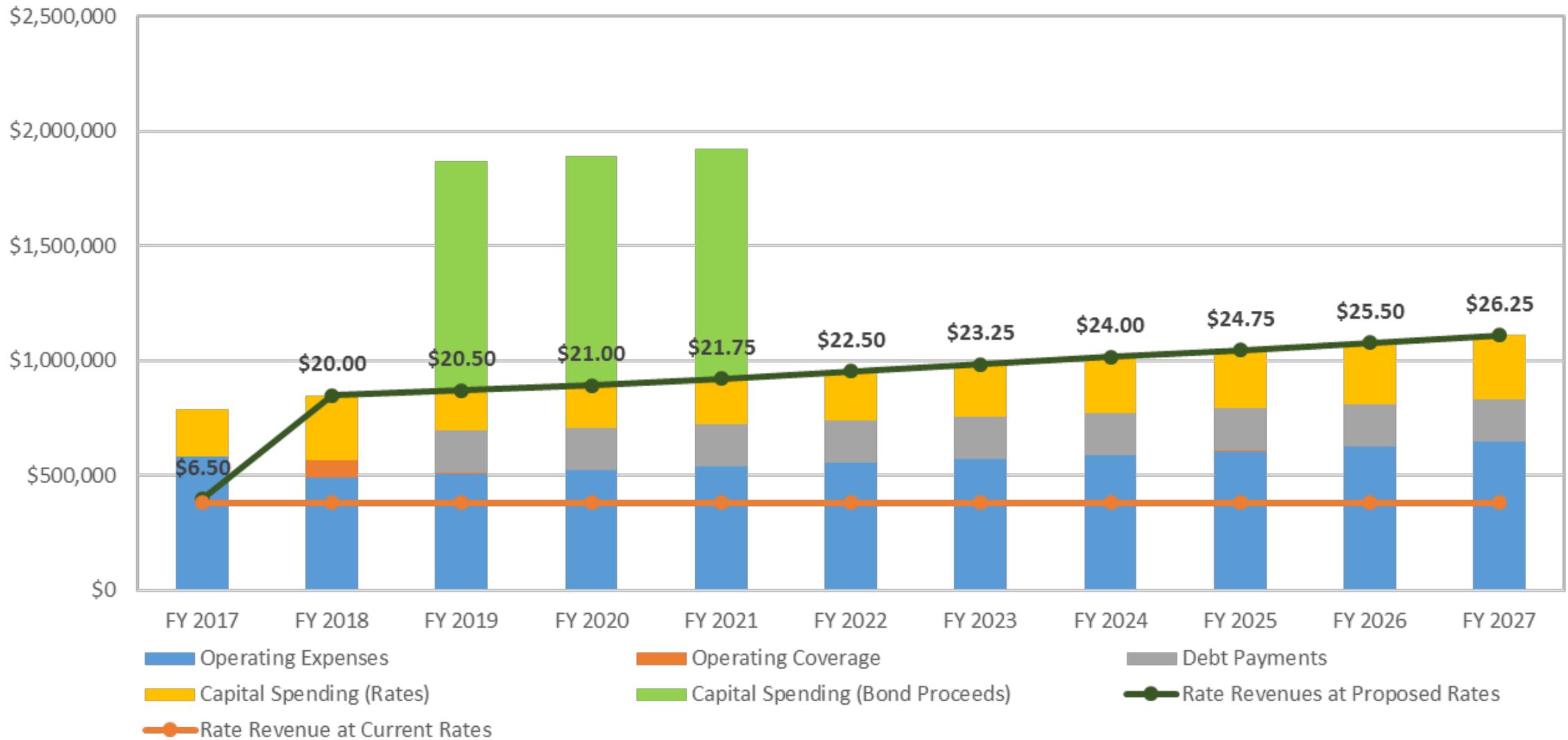


	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Operating Expenses	490,052	506,952	521,669	536,949	552,917
Operating Coverage	73,508	2,535	2,208	2,292	2,395
Debt Payments	-	183,470	183,470	183,470	183,470
Capital Spending (Bond Proceeds)	-	1,000,000	1,000,000	1,000,000	-
Capital Spending (Rates)	283,500	176,248	183,701	199,297	214,186
<b>Total Expenses</b>	<b>\$847,060</b>	<b>\$1,869,205</b>	<b>\$1,891,047</b>	<b>\$1,922,008</b>	<b>\$952,969</b>
<b>Revenue at Current Rates*</b>	<b>\$379,852</b>	<b>\$1,379,852</b>	<b>\$1,379,852</b>	<b>\$1,379,852</b>	<b>\$379,852</b>
Annual Surplus / (Deficit)	(\$467,208)	(\$489,352)	(\$511,195)	(\$542,156)	(\$573,116)
<b>Revenue at Proposed Rates*</b>	<b>\$847,362</b>	<b>\$1,869,205</b>	<b>\$1,891,047</b>	<b>\$1,922,008</b>	<b>\$952,969</b>
Annual Surplus / (Deficit)	\$302	-	-	-	-

\* Revenue includes use of bond proceeds to support capital spending

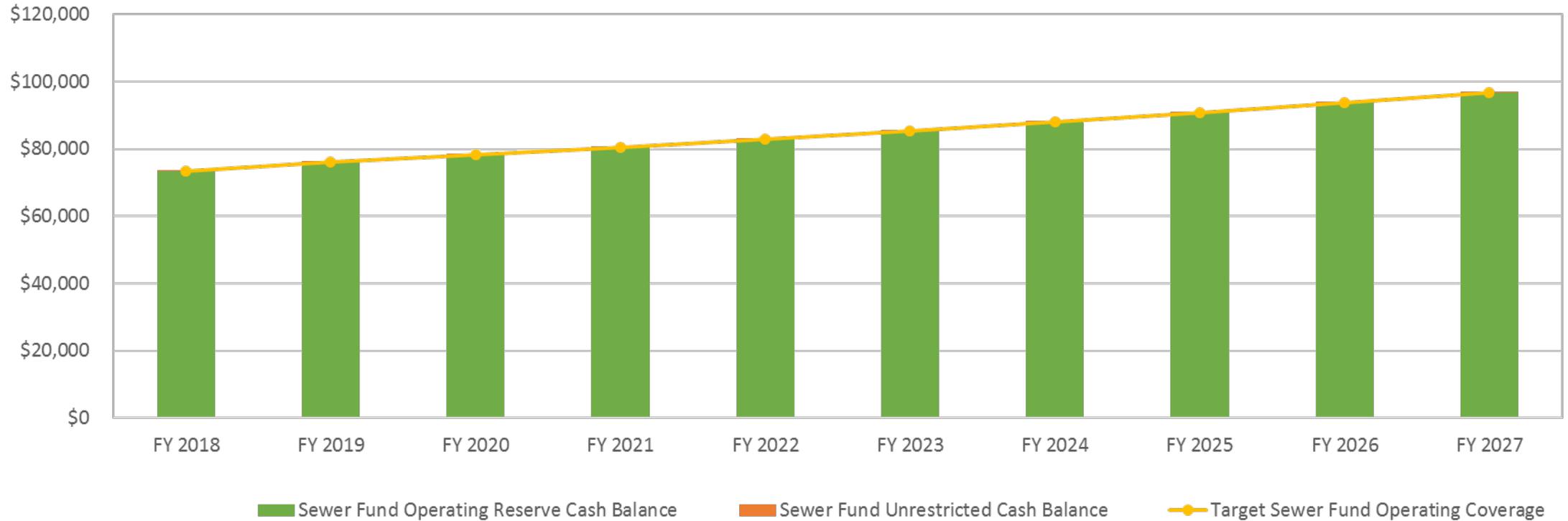
- **What does this projection allow the City to do?**
  - Fully fund the day to day operations and reserve requirements of the sewer collection system
  - **Televising all sewer lines within the next fiscal year (FY 2018)**
  - Spend **\$3.8 million** on line replacement from FY 2018 through FY 2022. **(Same as Scenario 1)**

# Rate Study Results – Scenario 3 (April 3, 2017)



# Rate Study Results – Scenario 3 (April 3, 2017)

Projected End of Year Sewer Fund Balance



(monthly)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Residential Bill	\$20.00	\$20.50	\$21.00	\$21.75	\$22.50	\$23.25	\$24.00	\$24.75	\$25.50	\$26.25
\$ Change	\$13.50	\$0.50	\$0.50	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75



# Discussion / Questions

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