



FINANCIAL PLAN: FY 2019 - FY 2024

City of Wilmington Department of Public Works (DPW)

19 March 2018

BUILDING A WORLD OF DIFFERENCE®



AGENDA

Overview: Wilmington Utilities

Financial Perspectives: The Road Travelled

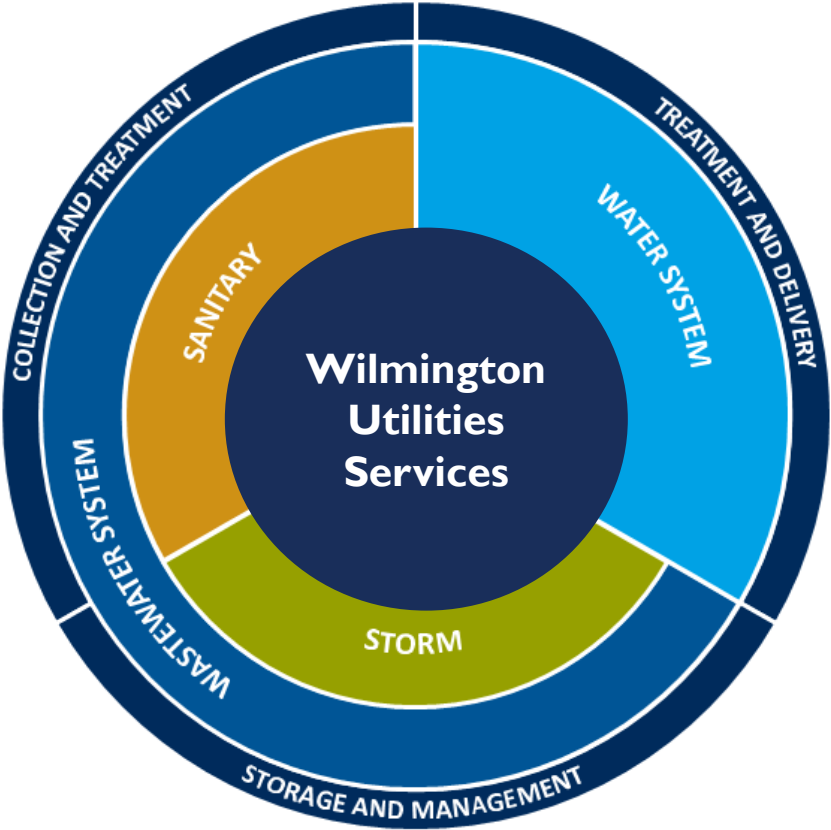
Financial Forecast: The Six-Year Plan

Summary

Overview- Wilmington Utilities

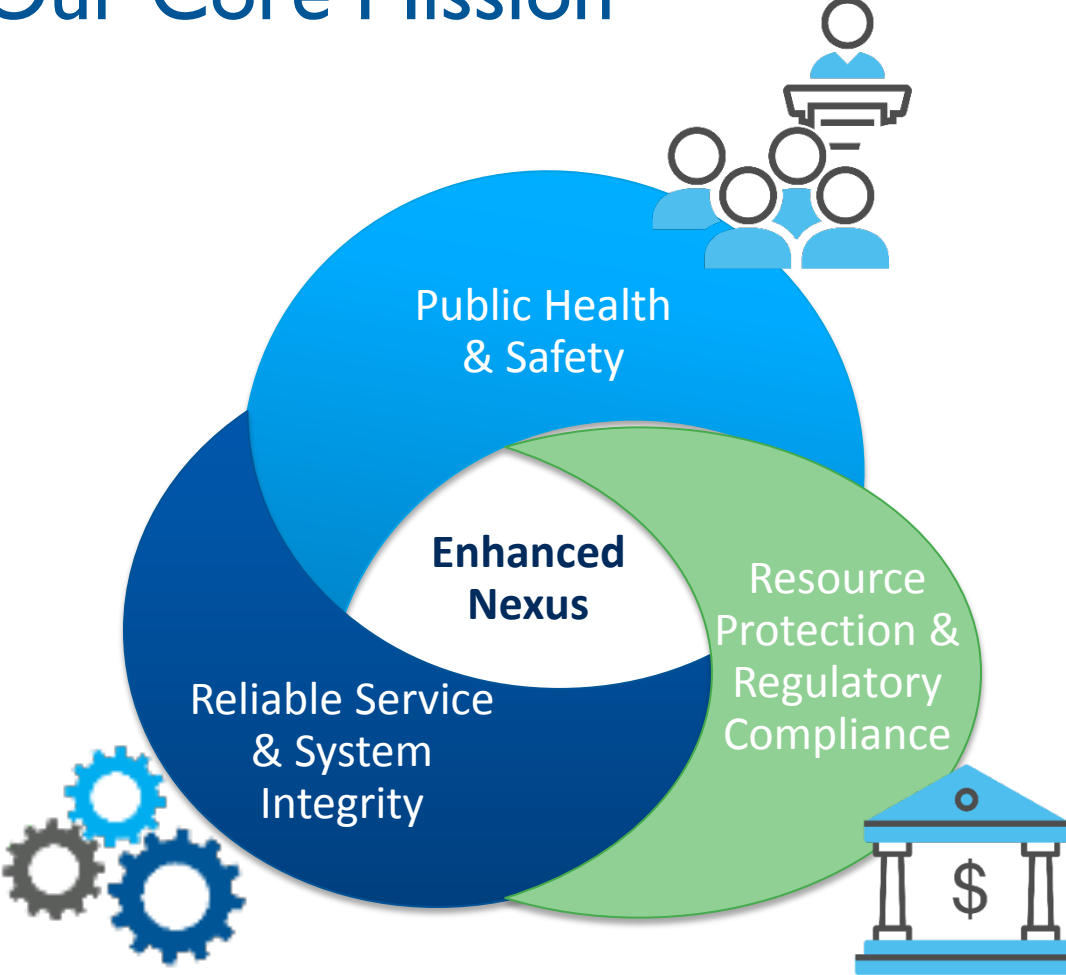
- ▶ Our Mission, System, and Services
- ▶ Water/Sewer Enterprise Fund

We Provide Integrated Water, Sewer, and Stormwater Services




Water is Life!

Our Core Mission



Wilmington Utilities System Highlights



WATER TREATMENT

- ✓ Porter Plant: (Clearwell – 1905; Plant – 1950)
- ✓ Brandywine Filtration: 100 years old

WATER STORAGE & DISTRIBUTION

- ✓ 9 Elevated Tanks; Porter Clearwell & Coolspring Tank
- ✓ Over 400 Miles of Water Mains

WASTEWATER COLLECTION & TREATMENT

- ✓ One Wastewater Treatment Plant (105 mgd)
- ✓ Renewable Energy Biosolids Facility (REBF)
- ✓ Over 300 Miles of Sewer Mains

STORMWATER MANAGEMENT

- ✓ Over 90% of the City service area is Combined Sewer System
- ✓ Tidegates, CSO Outfalls, Underground Storage, Stormwater Management Facilities

CUSTOMER CARE

- ✓ Customer Billing System; Web Payment Portal

The User Fee Construct

Services Provided



Annual Costs Incurred



Costs Recovered through User Fees

Services Received



The "Rationale Nexus" Test of a User Fee



Fee is assessed to address a regulatory purpose?



Fee is in exchange for benefits received by the general public?

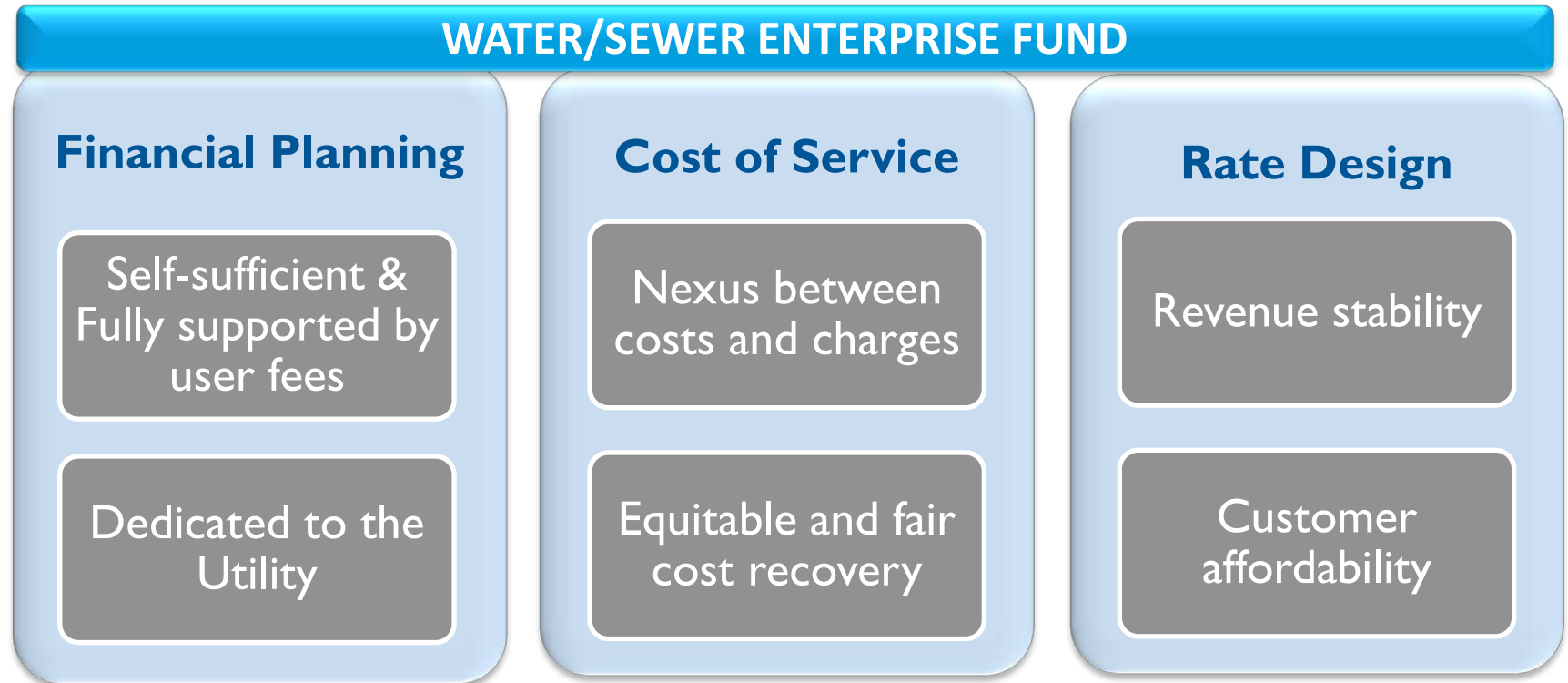
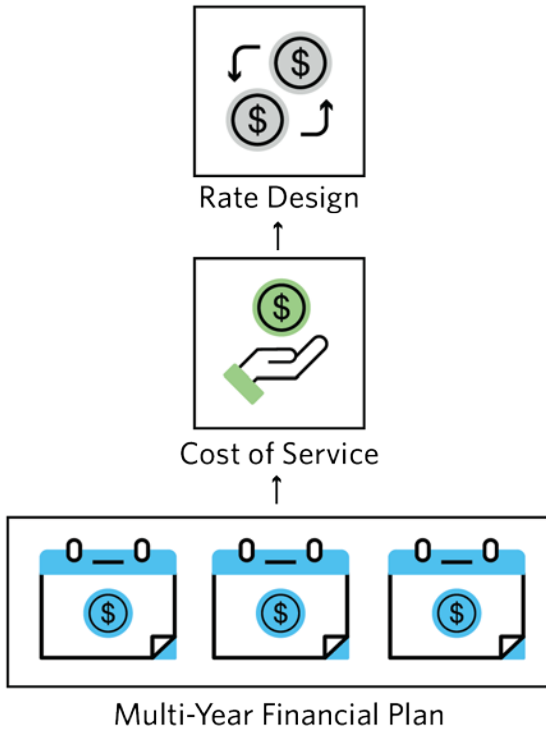


Fee provides reduction mechanism?



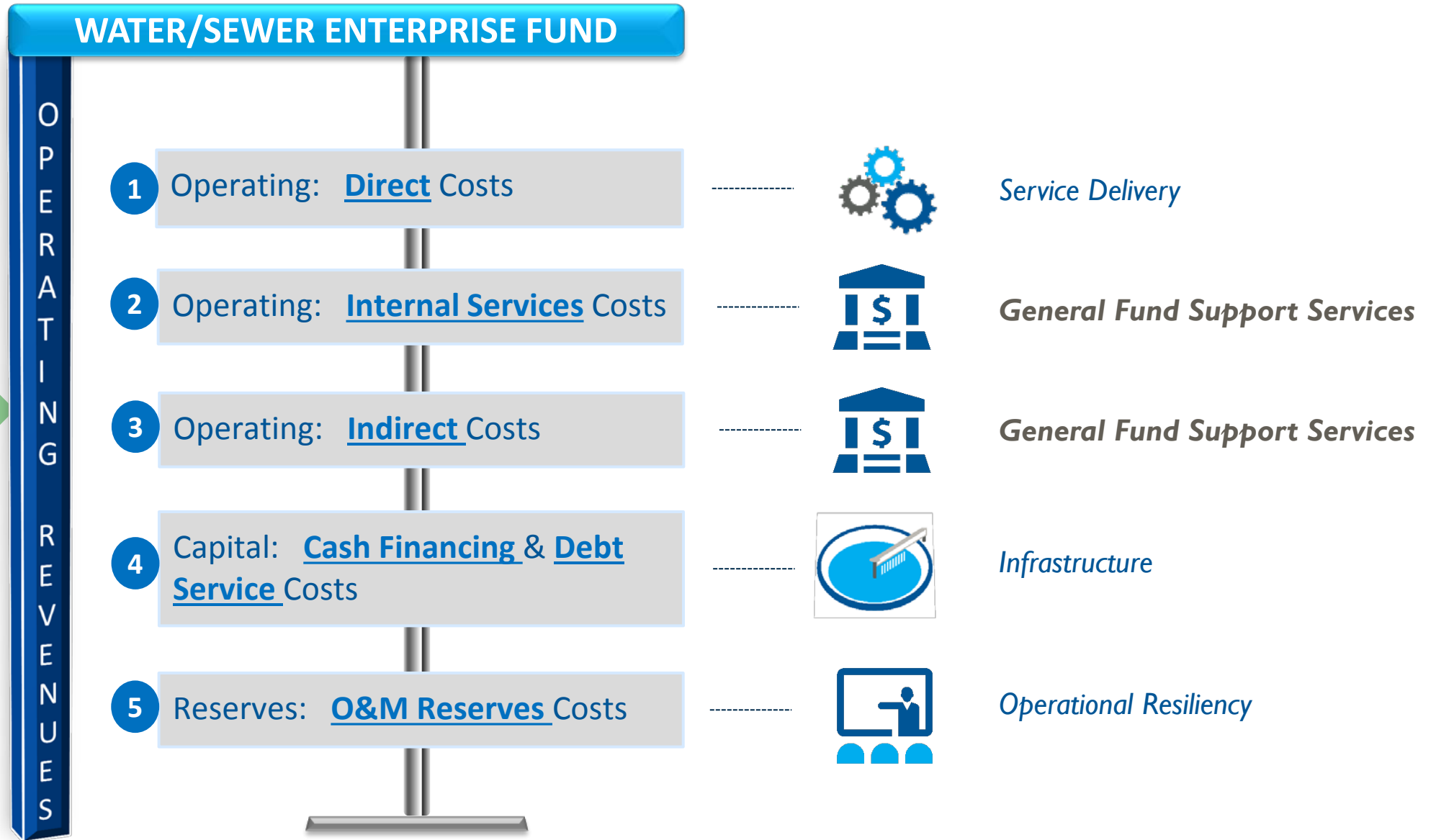
Fee is a fair approximation of costs incurred in providing services?

What are the key principles of an Enterprise Fund?

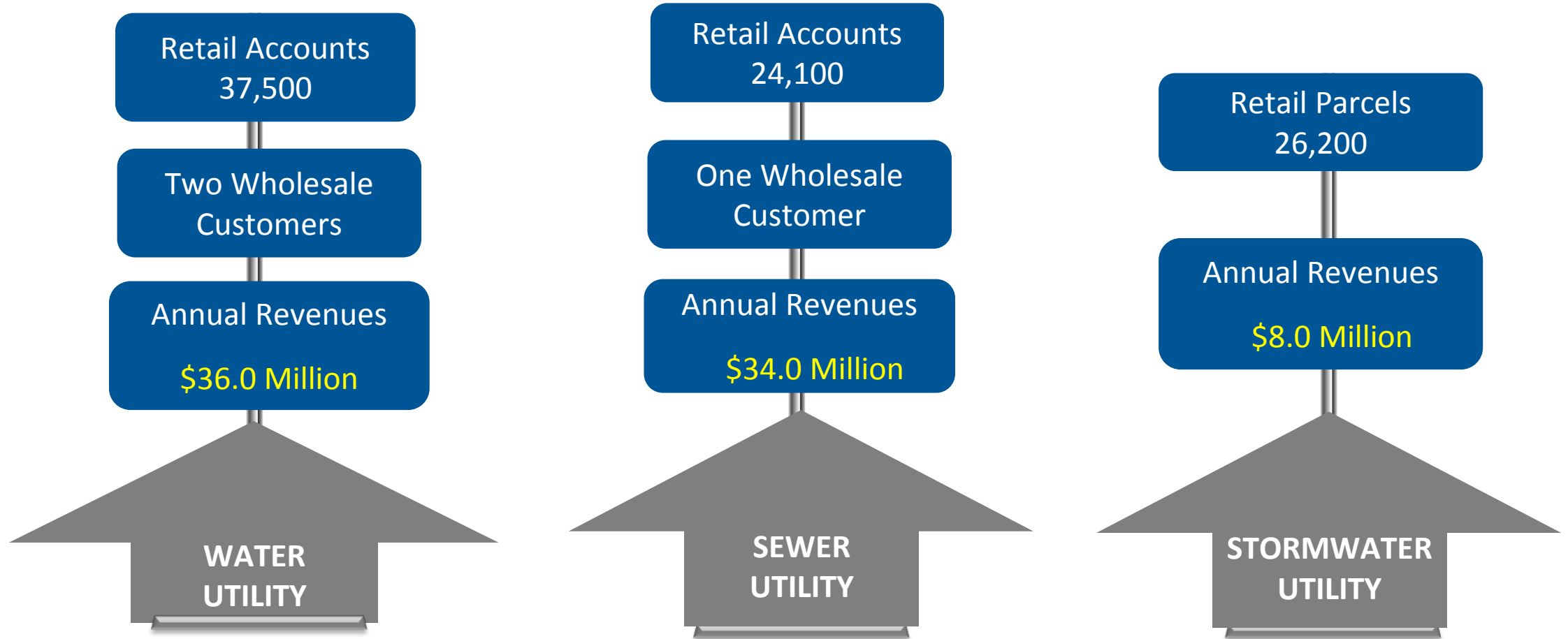


Water/Sewer Enterprise Fund At-a-Glance

- User Charges
- Water
 - Sewer
 - Stormwater



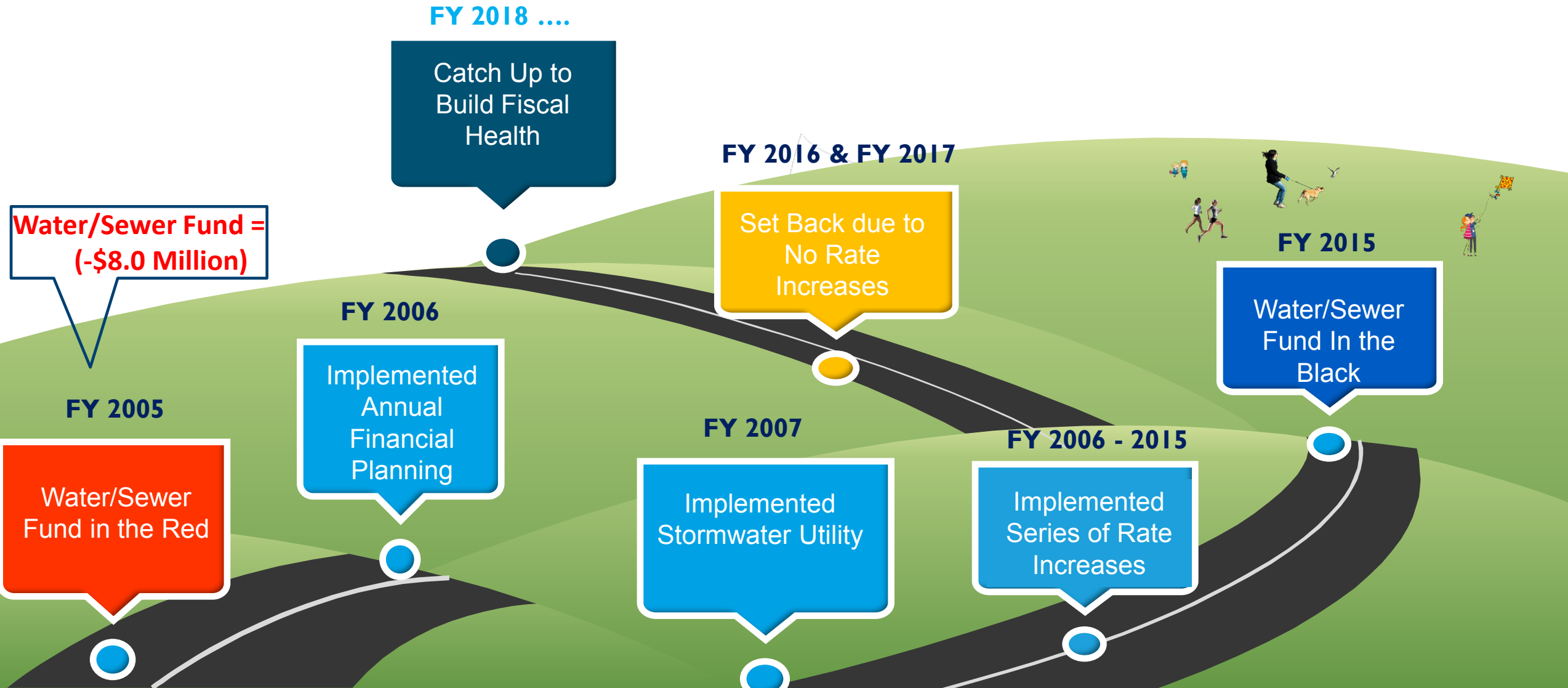
FY 2018 Customer Base & User Fee Revenues Overview



Financial Perspectives: The Road Travelled

- ▶ Historical Path
- ▶ Performance Objectives
- ▶ Study Process

THE ROAD TRAVELLED: JOURNEY TO FINANCIAL TRANSFORMATION



Financial Plan is Designed to Achieve Key Performance Metrics



FY 2018: 4%
FY 2017: No Increase
FY 2016: No Increase
FY 2015: 5%
FY 2014: 12%
FY 2013: 9%
FY 2012: 16%
FY 2011: 19%
FY 2010: 18.21%
FY 2009: No Increase
FY 2008: 12.5%
FY 2007: 15%

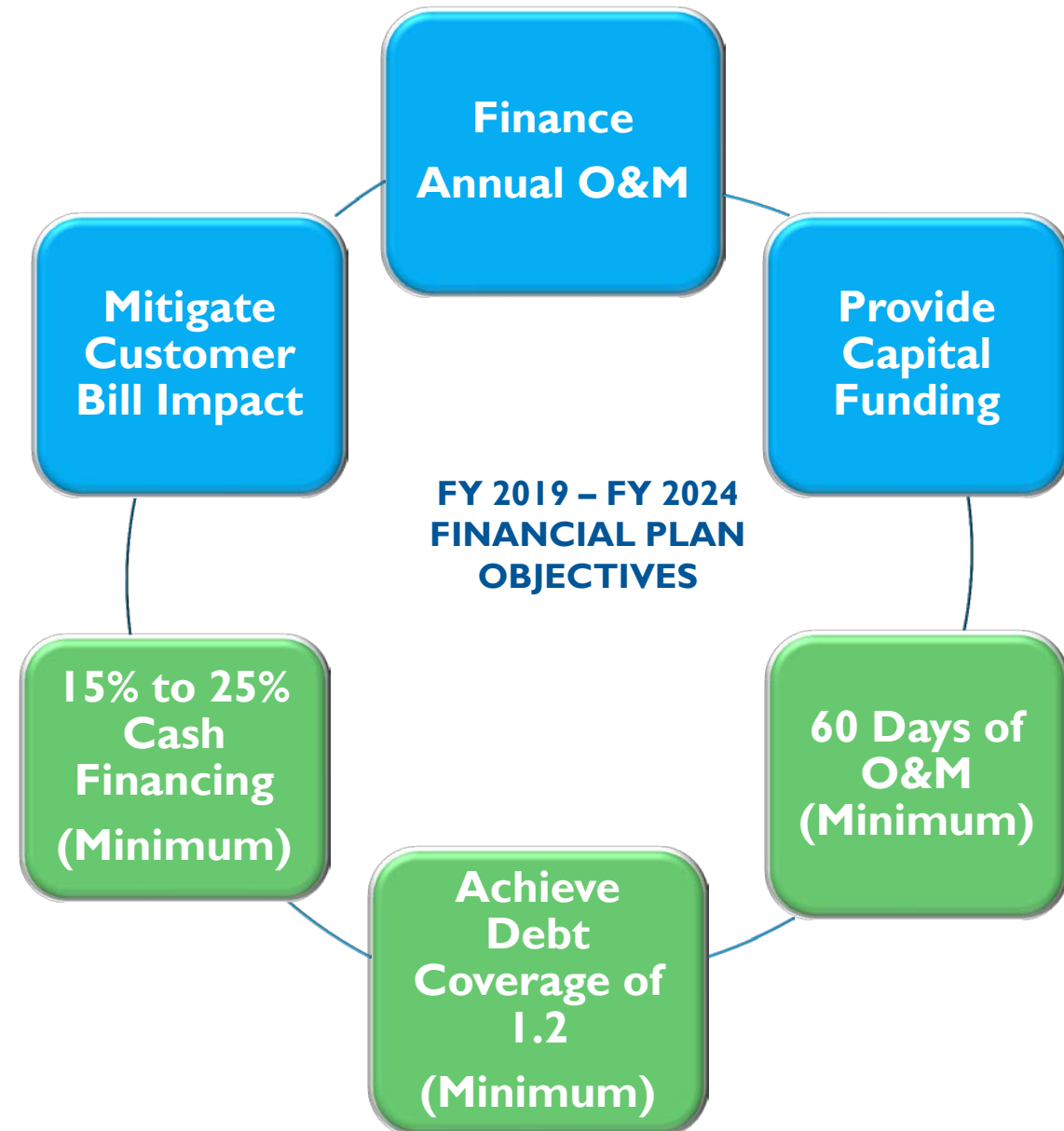


■ Key Challenges Addressed

- ✓ Transitioned out of a negative fund balance
- ✓ Compliance with regulatory requirements
- ✓ Multiple major \$15+ Million capital projects
- ✓ Enhanced investments in aging infrastructure
- ✓ Increased annual Indirect Cost payments to the General Fund
- ✓ \$15+ Million loan payback to the General Fund

Financial Plan is Designed to Achieve Key Performance Metrics

- Develop a practical and sustainable financial plan
- Address needs of diverse stakeholders

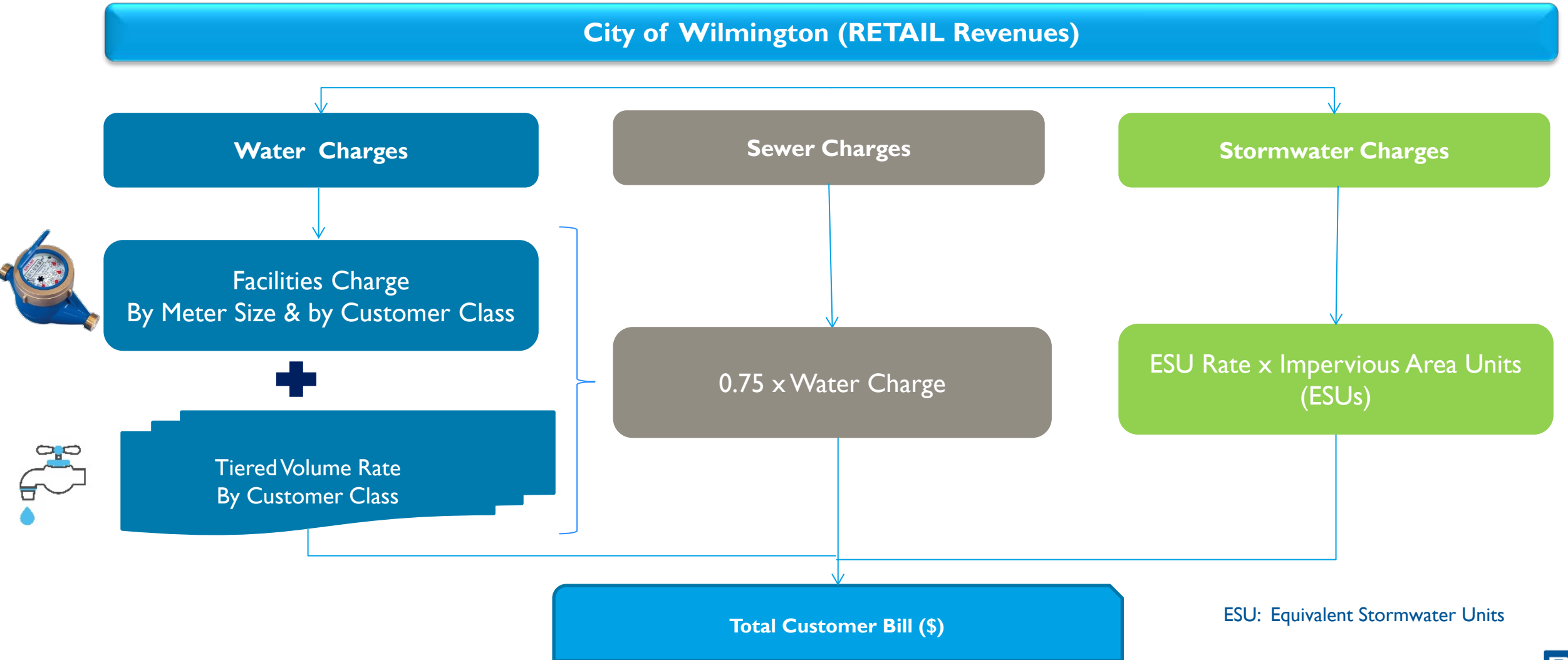


Financial Forecast: Six-year Plan

(FY 2019 through FY 2024)

- ▶ Revenues
- ▶ Revenue Requirements
- ▶ Financial Plan
- ▶ Bill Impact

Retail Revenues



ESU: Equivalent Stormwater Units

Retail Revenue Projections

- **Water/Sewer Facilities Charge Revenue**

- Projected based on the number of accounts by meter size:
- Projected to remain at the FY 2017 level

- **Water/Sewer Usage Charge Revenue**

- FY 2017 system wide usage reflects an increase relative to FY 2016
- Annual usage projection: Based on the FY 2018 adjusted usage level

	Description	FY 2016	FY 2017	FY 2018
1a	Inside City Usage (1,000 Gal)	1,969,540	1,999,113	2,059,791
1b	Inside City Usage Change (1,000 Gal)	(38,535)	29,573	60,678
1c	Inside City Change (%)	-1.92%	1.50%	3.04%
2a	Outside City Usage (1,000 Gal)	1,171,078	1,294,732	1,348,465
2b	Outside City Usage Change (1,000 Gal)	(57,787)	123,654	53,733
2c	Outside City Change (%)	-4.70%	10.56%	4.15%
3a	Total Usage (1,000 Gal)	3,140,618	3,293,845	3,408,256
3b	Total Usage Change (1,000 Gal)	(96,322)	153,227	114,411
3c	Total Usage Change (%)	-2.98%	4.88%	3.47%

Retail Revenue Projections

- **Stormwater Revenue**
 - Projected based on FY 2017 level of stormwater impervious area
 - Non-City Owned Parcels: 129,406 ESUs
 - City-Owned Parcels: 15,339 ESUs
 - Reflects continued non-payment from ACOE
- **City Accounts Billing**
 - City Accounts Phase- In complete 100% (FY 2019 and beyond)
- (Equivalent Stormwater Units – ESUs)

Wholesale & Miscellaneous Revenue Projections

Wholesale Revenues

- 💧 **New Castle County Wholesale Sewage Treatment Revenue**
 - Contract agreement in progress
 - Projections based on expected approach

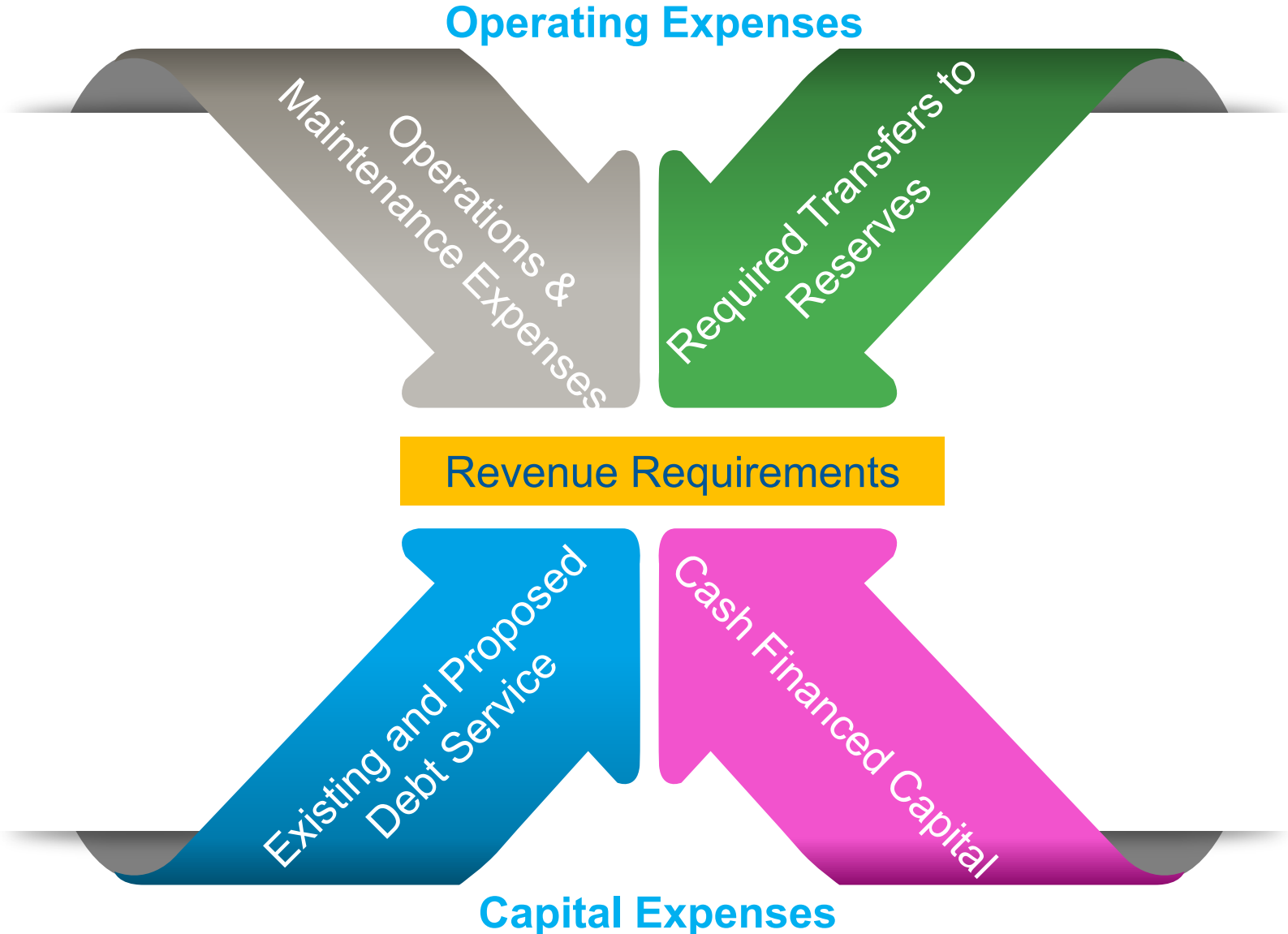
Miscellaneous Revenues

- 💧 **Contractual agreements**
 - Rentals
- 💧 **Projected as 2-year average**
 - Miscellaneous Permits
 - Wholesale Water Sales
 - Investment Income
- 💧 **Projected at prior fiscal year level**
 - Solar Panel Revenues
 - Turn Off/ Turn On Charges
 - Penalties & Interest
 - Settlement Fees

What Would the Revenues be Under Existing Rates?

Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
Water Revenues	35.75	35.83	35.83	35.83	35.83	35.86	35.86
Sewer Revenues	12.88	12.91	12.91	12.91	12.91	12.91	12.91
Stormwater Revenues	7.86	8.05	8.05	8.05	8.05	8.05	8.05
New Castle County Sewer	21.07	19.63	19.83	20.03	20.23	20.23	20.23
Miscellaneous Revenues	3.29	3.32	3.34	3.36	3.38	3.40	3.41
Total Revenues Estimated	80.85	79.74	79.96	80.18	80.40	80.45	80.46

Projected Revenue Requirements



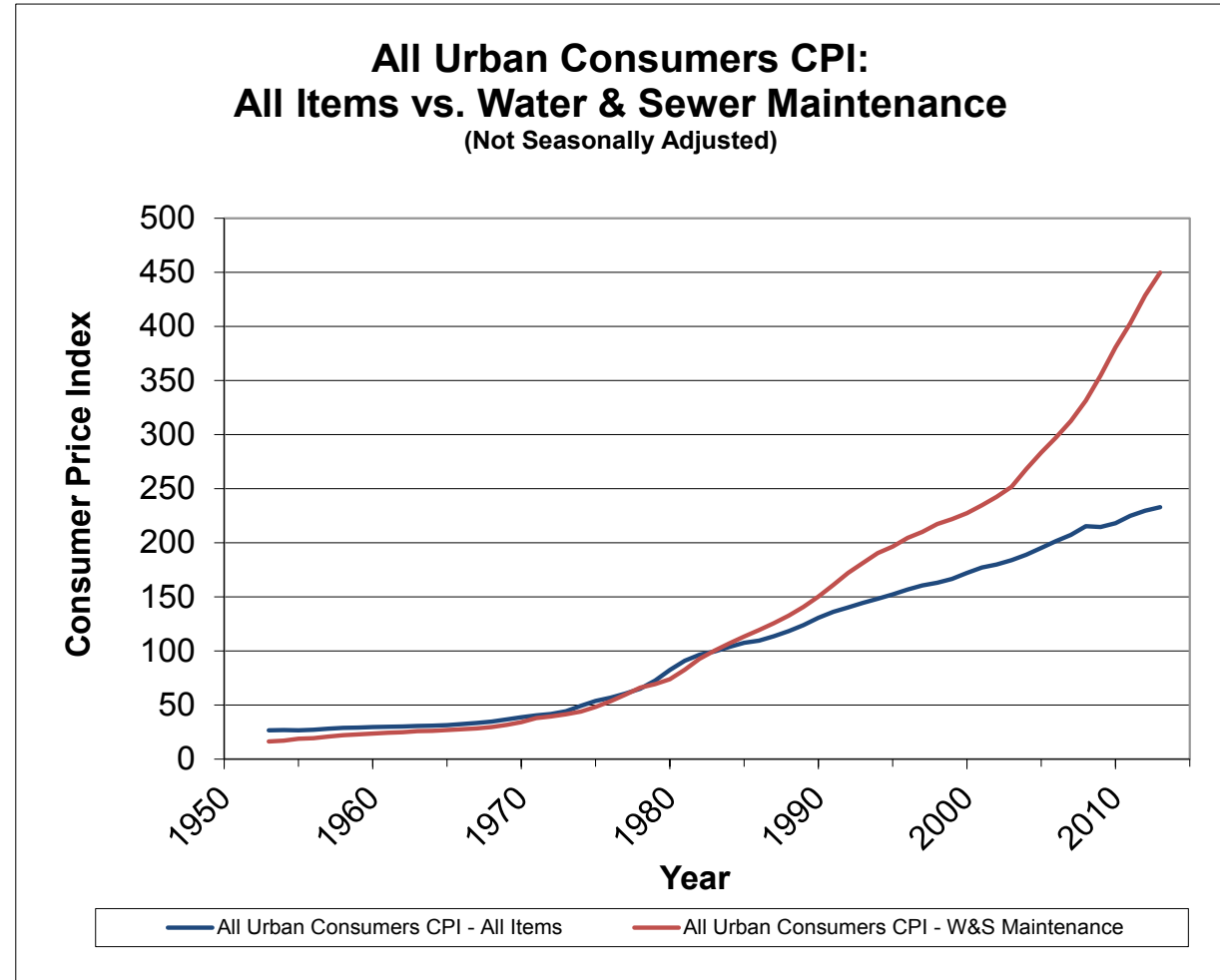
Operations & Maintenance Expenses

- FY 2018 O&M: Based on Council Approved Budget
- FY 2019 O&M: Based on Proposed FY 2019 Budget
- FY 2020 & Beyond: Escalated Projections
- Escalation Factors Used:
 - Benefits: 4.5% (FY 2019), 8% (FY 2020), 12 % (FY 2021), 7.5% (FY 2022) & 10% thereafter
 - Chemicals: 2.5%
 - Utilities: 1% (FY 2019 & FY 2020), 3% (FY 2021-FY 2024)
 - Sewage Treatment Fees: 1.5% (FY20 through FY 22)
 - All Other Costs: 2.5%

Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
O&M	58.88	60.39	62.09	63.65	65.40	67.24

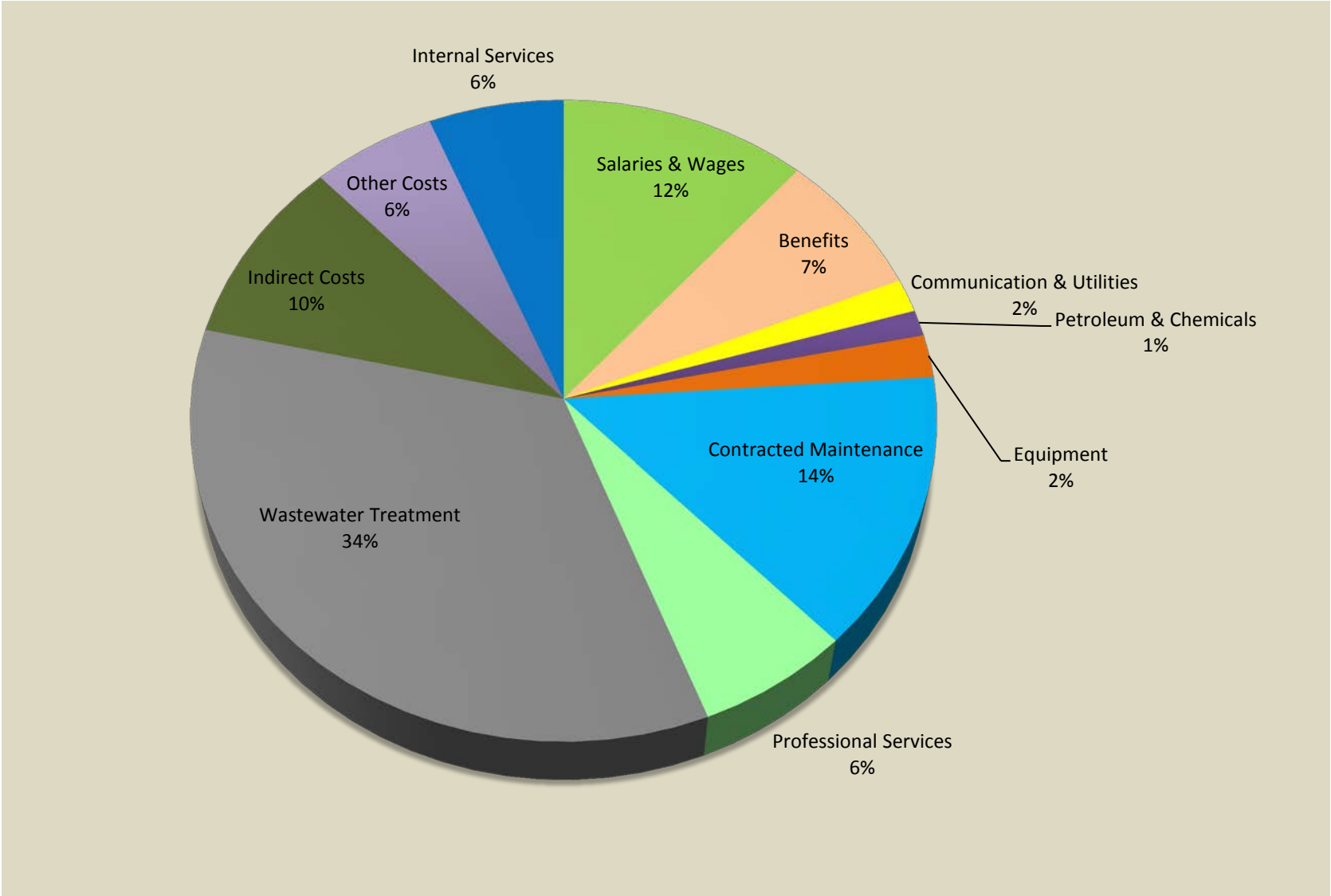
Water/Sewer Cost Increase Trend

The water & sewer component of CPI has experienced higher inflation than the Overall CPI Index since 1980



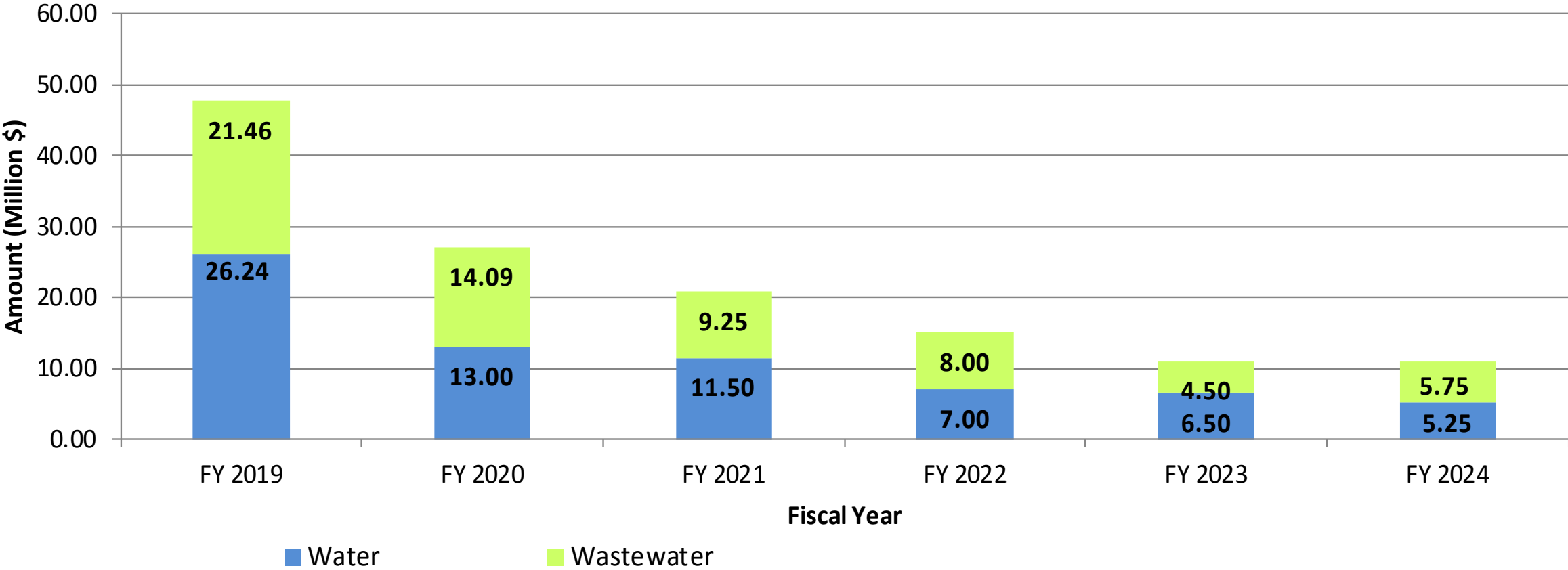
CPI: Consumer Price Index

FY 2019 O&M Expenses Distribution - By Category



Water & Wastewater Capital Program Projections

Capital Improvement Program FY 2019 - FY 2024



Capital Program: Major Multi-year Projects (FY 2019 – FY 2024)

Water CIP

- Water Main Improvements: \$31.2 M
- Large Transmission Main: \$8.0 M
- Porter Filter Plant: \$13.6 M
- Small Meter Replacement: \$3.0 M

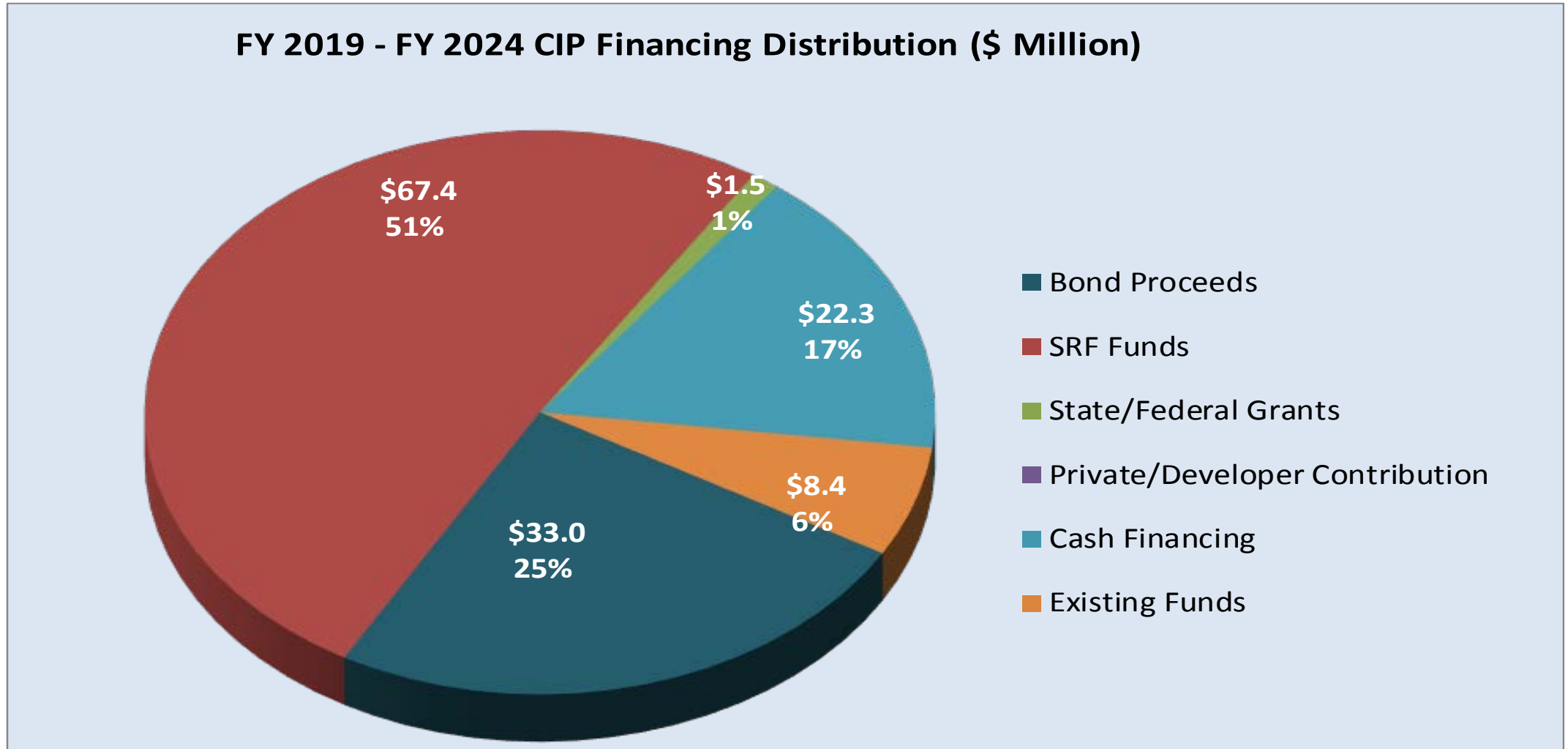
Wastewater CIP

- Minor Sewer Improvements: \$7.0 M
- Large Diameter Sewer Improvements: \$11.0 M
- Pumping Station Upgrades: \$3.0 M
- WWTP Improvements: \$14.5 M

Stormwater CIP

- Stormwater Drainage Improvements: \$6.5 M
- South Wilmington Wetlands: \$15.6 M
- Urban Forest Program: \$1.5 M

What are the Expected Funding Sources for the Capital Program?



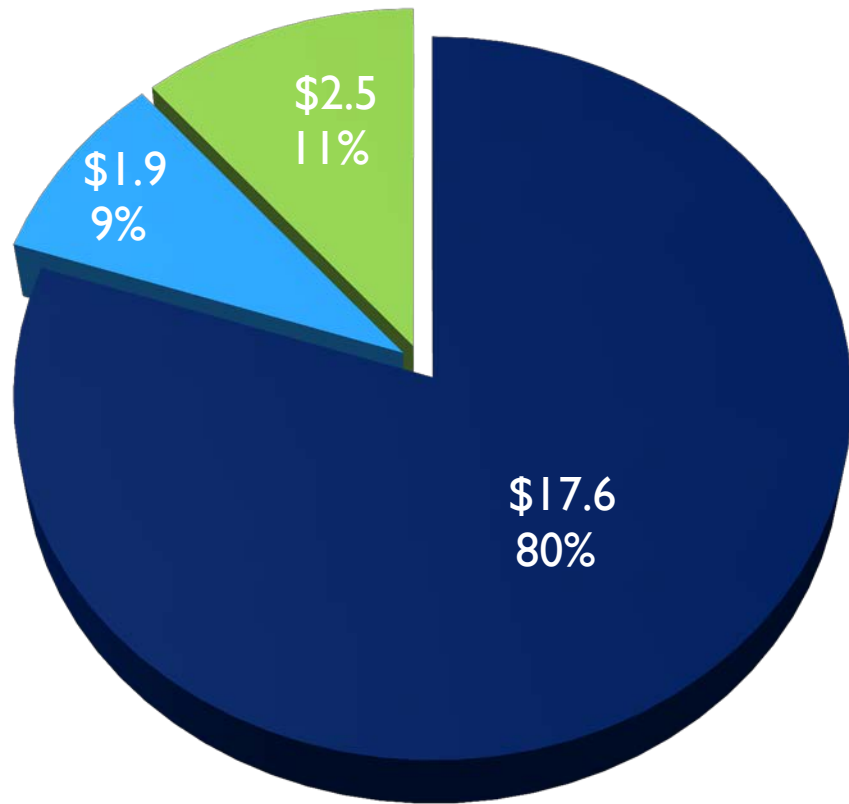
Debt Service Projections

- Existing Debt Service: \$108.3 M
- Proposed Debt Service: \$ 29.9 M

Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	TOTAL
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
Existing Debt Service	17.6	18.1	17.5	18.6	18.0	18.5	108.3
Future Debt Service	1.9	2.9	4.9	6.2	6.6	7.5	29.9
Total	19.5	21.0	22.3	24.8	24.6	26.1	138.2

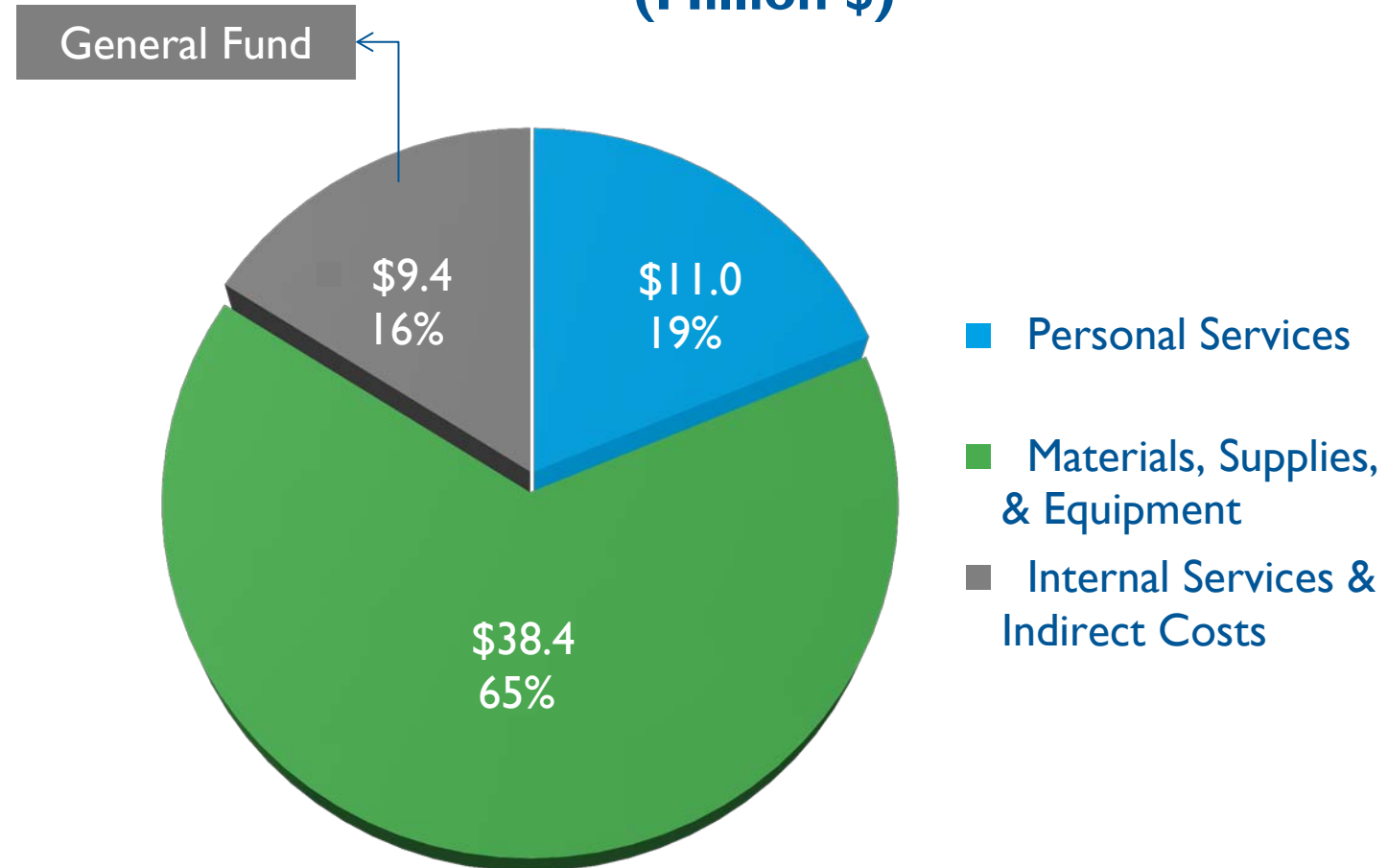
Summary of FY 2019 Revenue Requirements

FY 2019 Capital Financing (Million \$)



■ Existing Debt ■ New Debt ■ Cash Financing

FY 2019 O&M Costs (Million \$)



Proposed Financial Plan

Key Assumptions:

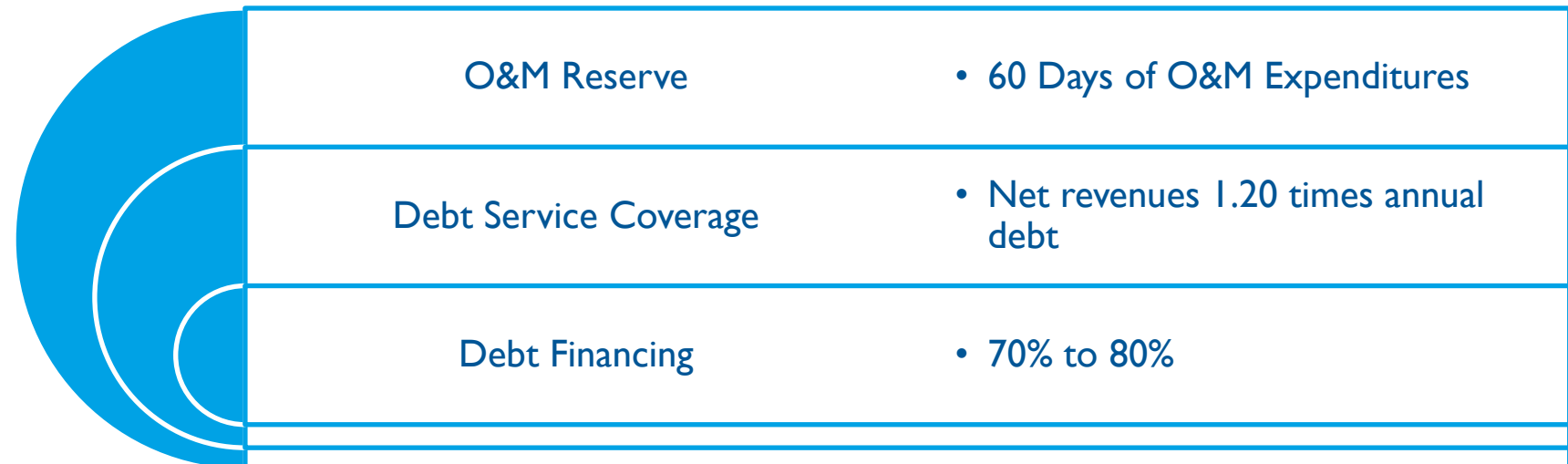
1. Usage and Accounts projected at the FY 2018 level
2. NCC will pay its fair share of costs
3. \$6.0 Million in Rate Stabilization Fund in FY 2018
4. Operating reserve & Rate Stabilization balance will be dedicated to the Water/Sewer fund
5. No transfers to the General Fund
6. FY 2019 rates will be effective **September 1, 2018**
7. Monthly billing transition effective July 1, 2018

#	Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	Rate Increase (Water/Sewer)	4.00%	4.00%	5.60%	5.60%	5.60%	4.50%	4.25%
2	Rate Increase (Stormwater)	0.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%
		(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
3	Estimated Revenues	80.85	81.15	84.32	87.55	90.95	93.78	96.52
4	Less: O&M Expenditures	(57.33)	(58.88)	(60.39)	(62.09)	(63.65)	(65.40)	(67.24)
5	Less: Debt Service	(16.62)	(19.45)	(21.00)	(22.31)	(24.79)	(24.60)	(26.08)
6	Annual Operating Balance (Line 3 + Line 4 + Line 5)	6.90	2.82	2.93	3.15	2.51	3.78	3.20
7	Add: Beginning Year Operating Balance	11.14	9.55	8.37	9.01	9.66	10.48	10.77
8	Add: Water/Sewer Fund Other Revenues	3.50	0.00	0.00	0.00	0.00	0.00	0.00
9	Estimated Operating Balance (Line 6 + Line 7 + Line 8)	21.54	12.37	11.30	12.16	12.17	14.26	13.97
10	Less: Cash Financed Capital	(6.00)	(2.50)	(4.50)	(5.90)	(3.35)	(3.00)	(3.00)
11	Less: (Deposit to RSF) Add: Withdraw from RSF	(6.00)	(1.50)	2.20	3.40	1.65	(0.50)	0.15
12	Estimated Operating Balance (Line 9 + Line 10 + Line 11)	9.54	8.37	9.00	9.66	10.47	10.76	11.12
13	Target O&M Reserve (60 Days of Annual O&M)	9.42	9.68	9.93	10.21	10.46	10.75	11.05
14	Rate Stabilization Fund Balance	6.0	7.5	5.3	1.9	0.3	0.8	0.6

Proposed Financial Plan: Performance on Key Indicators

	Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
a	Rate Increase (Water/Sewer)	4.00%	4.00%	5.60%	5.60%	5.60%	4.50%	4.25%
b	Rate Increase (Stormwater)	0.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%
1	O&M Reserve (Days) (60 Days of Annual O&M)	60.7	51.9	54.4	56.8	60.0	60.1	60.4
2	Debt Coverage Ratio	1.42	1.15	1.14	1.14	1.10	1.15	1.12
3	Debt Financed Capital Ratio	0.69	0.95	0.83	0.72	0.78	0.73	0.73

Target: Performance targets reflect “Minimum” utility best financial management practices



Comparison with Prior Six Year Financial Forecast (FY2017 Rate Study)

	Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
a	Rate Increase (Water/Sewer)	4.00%	4.50%	4.50%	4.25%	4.00%	3.75%
b	Rate Increase (Stormwater)	0.00%	0.00%	0.00%	0.00%	4.00%	3.75%
1	O&M Reserve (Days) (60 Days of Annual O&M)	60.14	60.09	60.59	60.73	60.92	61.20
2	Debt Coverage Ratio	1.40	1.21	1.15	1.16	1.05	1.07
3	Debt Financed Capital Ratio	0.78	0.89	0.88	0.83	0.87	0.81

Residential Bill Impact (FY 2019) @2,000 gallons of Monthly Usage

FY 2019 Rate Increase Impact on Typical Residential Customer

Water, Sewer & Stormwater Typical Monthly Bill Impact

(Inside City Residential 5/8 inch meter @ 2,000 gallons monthly consumption)

Services	Monthly Charge FY 2018	Monthly Charge FY 2019	Monthly Increase
Water	19.40	18.48	(0.92)
Sewer	14.55	13.86	(0.69)
Stormwater	4.95	4.95	0.00
Total Bill	\$38.90	\$37.29	(\$1.62)

- Nearly **33%** of the Inside City customers use **2,000 gallons or less** per month
- Reduction is due to the proposed decrease in usage allowance from 8,000 gallons to 6,000 gallons

Residential Bill Impact (FY 2019) @4,000 gallons of Monthly Usage

FY 2019 Rate Increase Impact on Typical Residential Customer

Water, Sewer & Stormwater Typical Monthly Bill Impact

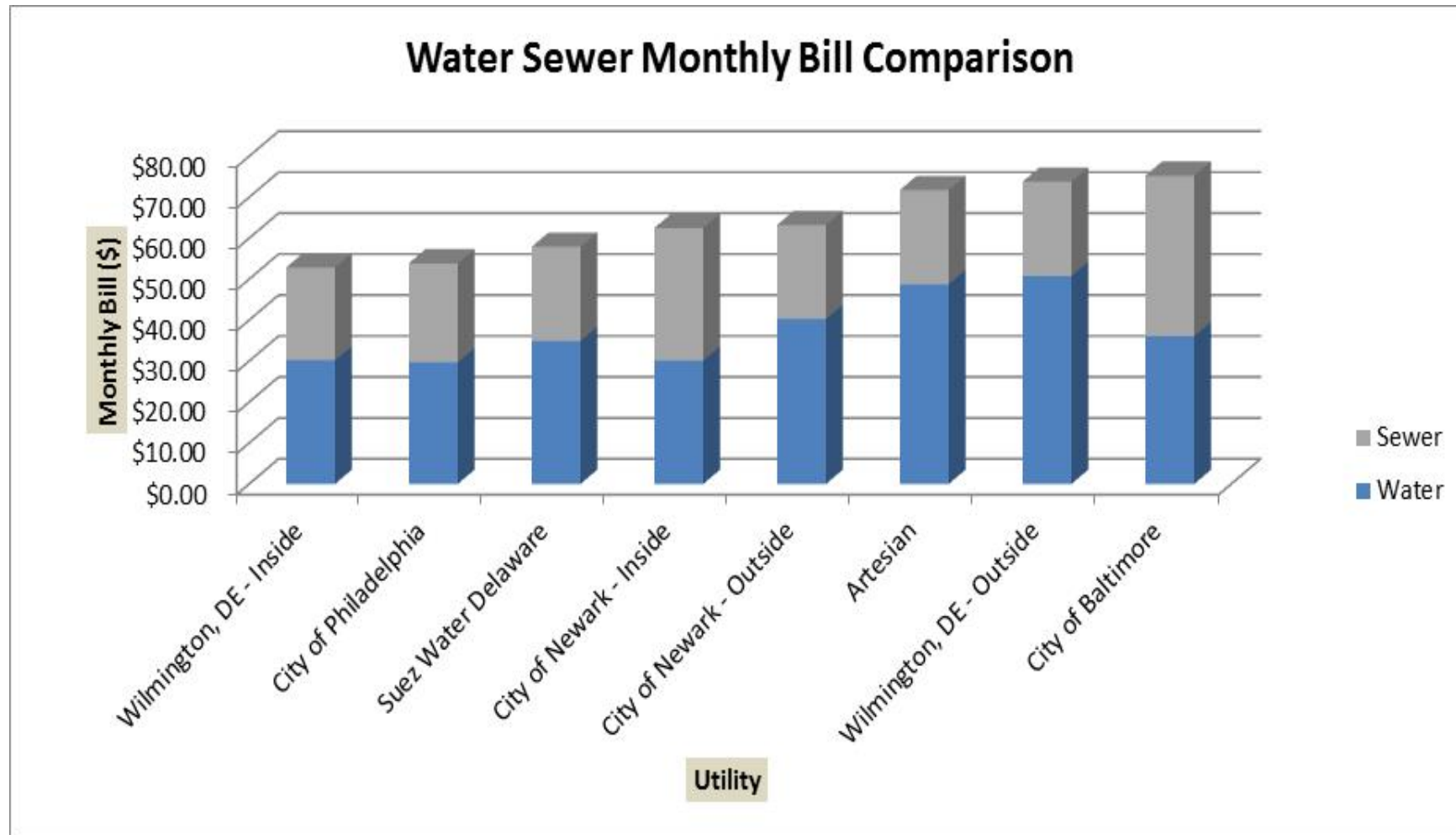
(Inside City Residential 5/8 inch meter @ 4,000 gallons monthly consumption)

Services	Monthly Charge FY 2018	Monthly Charge FY 2019	Monthly Increase
Water	26.91	30.19	3.28
Sewer	20.18	22.64	2.46
Stormwater	4.95	4.95	0.00
Total Bill	\$52.04	\$57.78	\$5.74

- **33%** of the Residential customers use between **2,000 and 4,000** gallons per month;
- Increase is due to the cumulative effect of rate increase coupled with the proposed decrease in usage allowance from 8,000 gallons to 6,000 gallons

Peer Utility Benchmarking (FY 2019 Rates)

- Based on a 5/8" Residential Meter with a monthly usage allowance of 4,000 gallons



In Summary....

The Enterprise Fund needs to sustain its path towards financial resiliency



Recommendations

We recommend the implementation of this six-year financial plan to begin the journey towards sustainability and on to resiliency



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