



CSO/WWI Conference

This Is Not a Drill
Surviving a Pandemic

September 30, 2021



This is Not a Drill

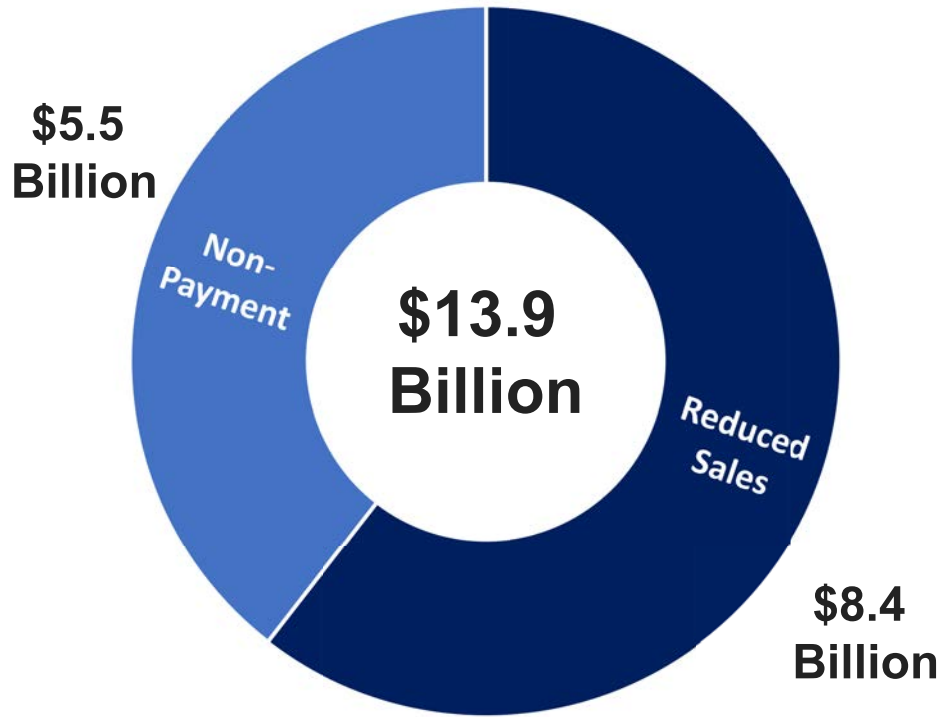
Covid-19 pandemic has served as a real time test for the financial resiliency of utilities

It's been 18-months since the pandemic declaration what have we learned?

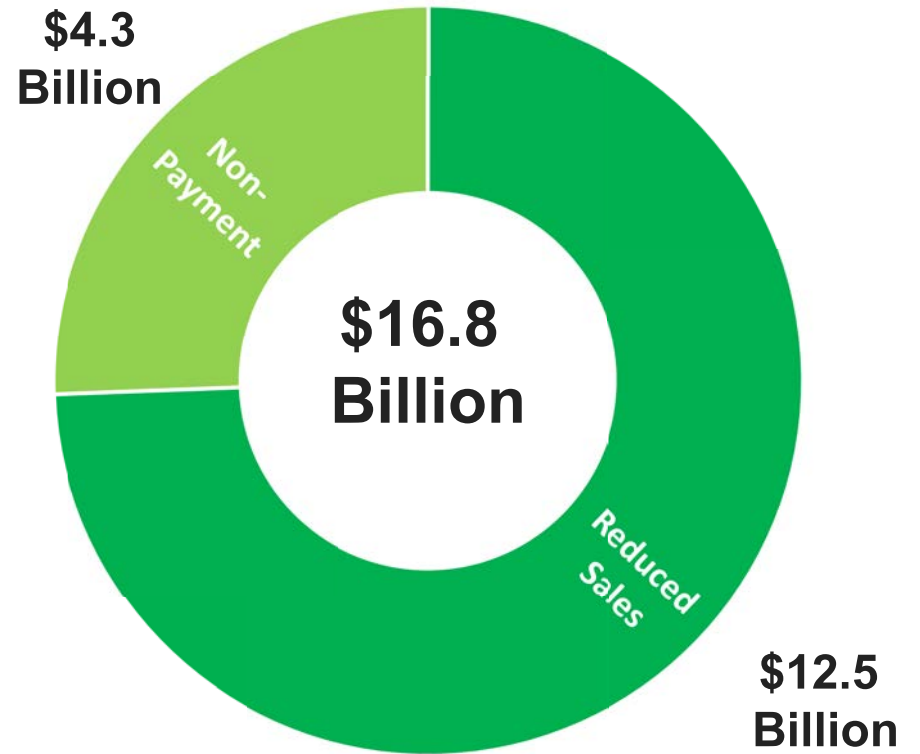
What did we get right and what did we get wrong now that we can look back?



Estimated Impacts of Pandemic on Utilities



16.9% Impact on Water Sector



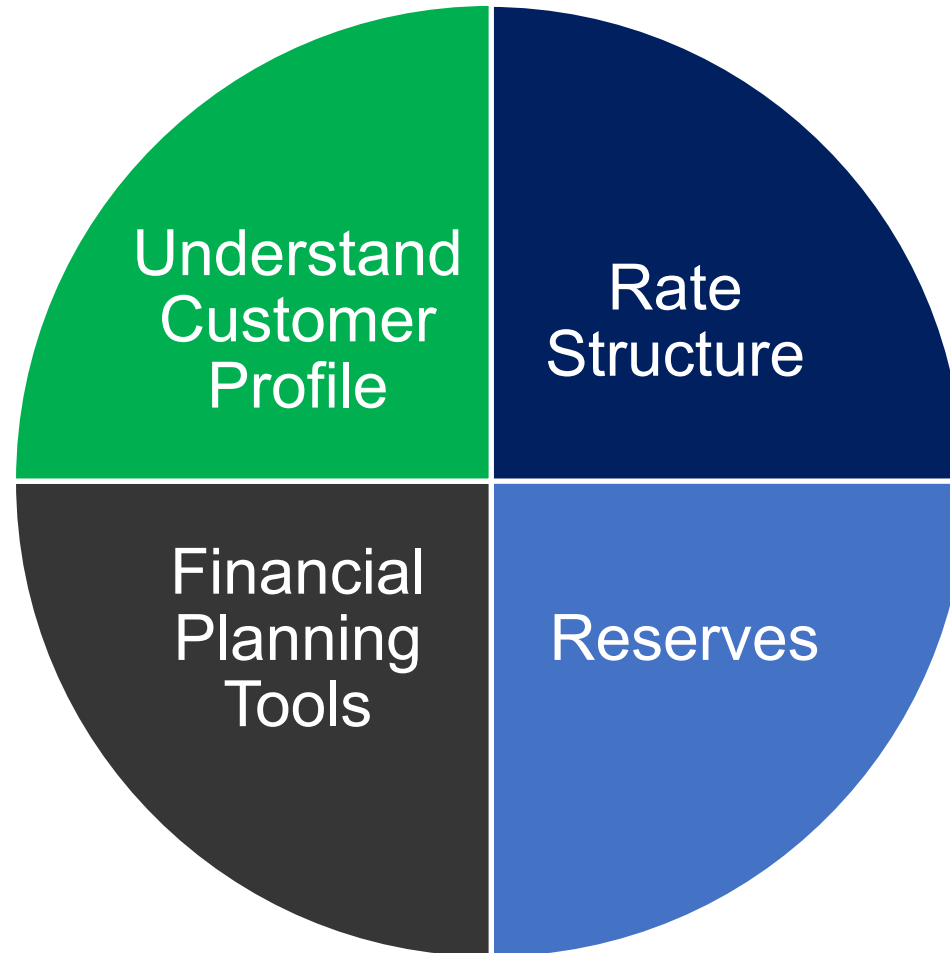
20% Impact on Clean Water Sector

Actual Impacts of Pandemic on Utilities

Estimates have yet to be developed on the full impact of the pandemic our experience with utilities has revealed:

- 1) Reductions in sales have not materialized to the levels feared
 - Majority of utility providers serve a diverse customer base
- 2) Non-payments have exceeded expectations
 - Elimination of shut-off programs
 - Extended length of pandemic
- 3) Utilities reduced expenditures (operating and capital in anticipation of impacts)
 - Financial performance did not suffer as much anticipated
 - Increased deferred maintenance

Core Strategies



Understanding Your Customer Base

Pandemic had varying impacts based on utility customer base

- Residential service providers experienced increases in demand
- Commercial / industrial providers experienced significant falloff and gradual recovery

Cost of providing utility service is largely fixed

Critical to understand customer base to inform financial resiliency approach

- What is our customer profile?
- Do we have one customer that makes up 10% of revenues or more?
- What can we do to reduce risk given our profile?



Rate Structure

Utility rate structure impacted how utilities were affected by the pandemic

- **Increase revenue stability**
 - Transition to greater % from fixed charges
 - Right size fixed charges
 - Consider adoption of dedicated funding source from fixed infrastructure charge

- **Evaluate structure of wholesale and industrial contracts**
 - Ability to incorporate take or pay provision
 - Provides minimum payment regardless of use

Rate Structure: Stormwater Fees

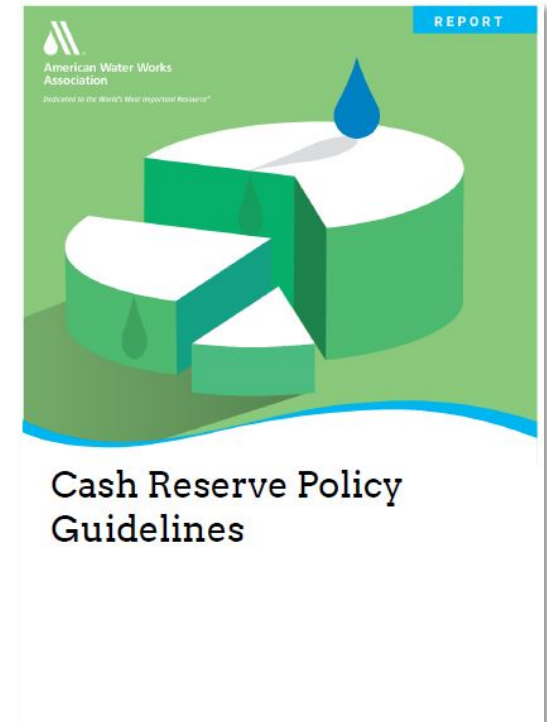


Reserves

Utility reserves are critical and became essential for many utilities during the pandemic

Reserves often include:

- Operating and Maintenance - Working Capital
- Capital Replacement - Address capital emergencies and deferred maintenance
- Debt Service - Bond requirement
- Rate Stabilization - Address unforeseen variations in revenues or system needs – perfect for a pandemic



Financial Planning Tools

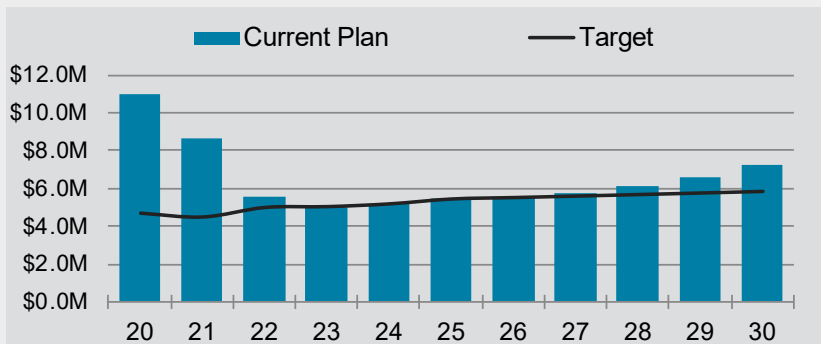
Financial planning tools/models allowed utilities to stress test utility finances and course correct if necessary

Ability to Develop Solutions

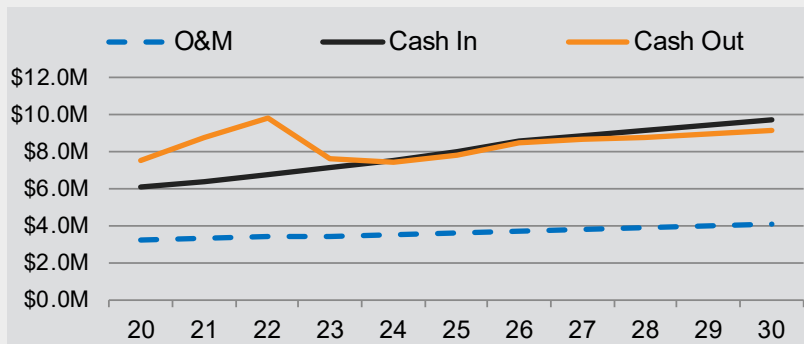
- Impacts on near-term and long-term financial performance
- Necessary revenues adjustments
- Operational cost reductions
- Deferral of capital projects

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2024	FY 2030
Sewer Rate Plan	0.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	3.00%	3.00%	3.00%	3.00%	23.87%	55.16%
All-In DSC	1.26	1.55	1.38	1.51	1.59	1.63	1.80	1.86	1.93	2.00	2.07	I/Cash Fund	\$0

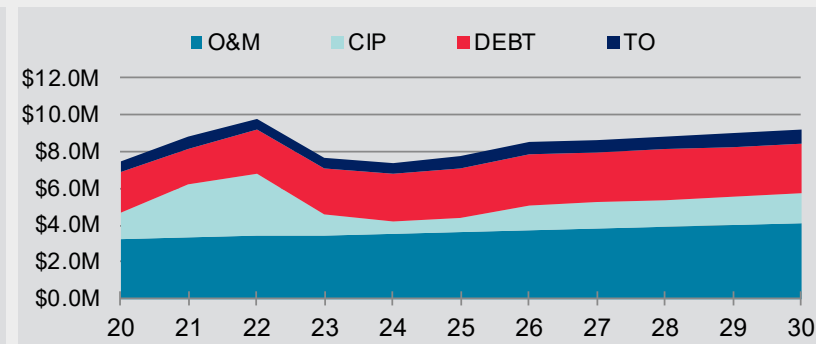
Operating Fund



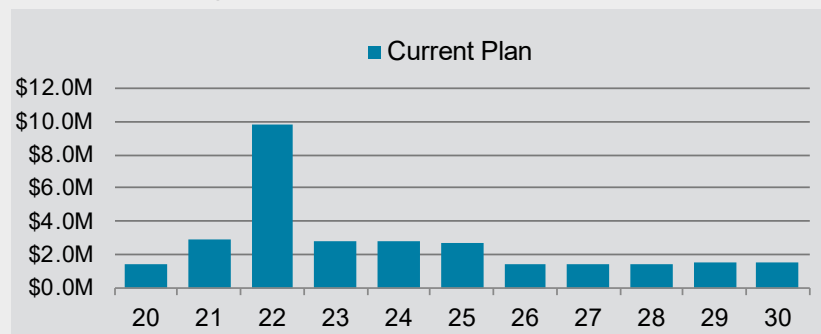
Revenues vs. Expenses



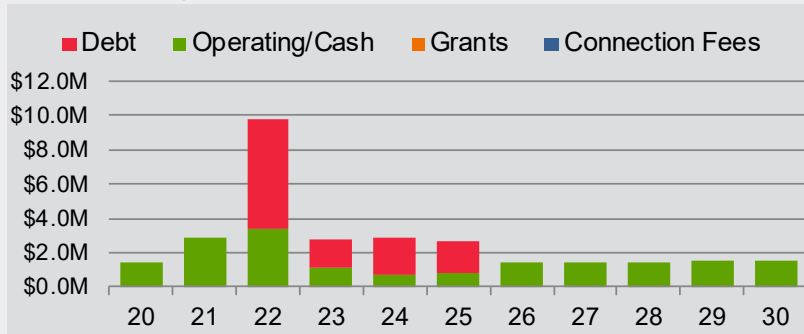
Expenses by Type



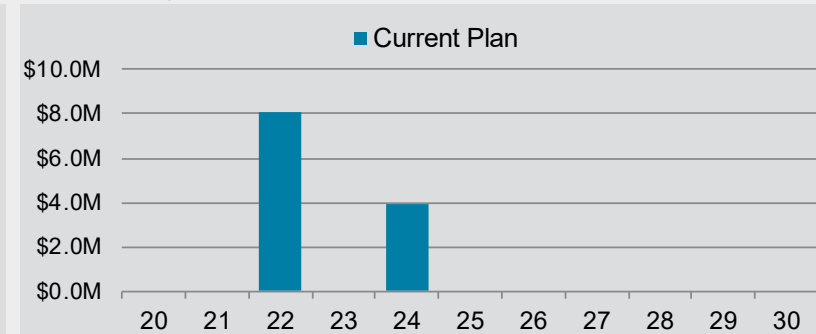
CIP Spending



CIP Funding



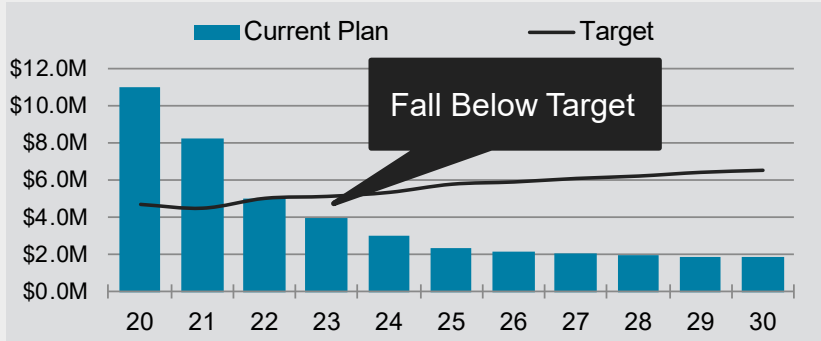
Borrowing



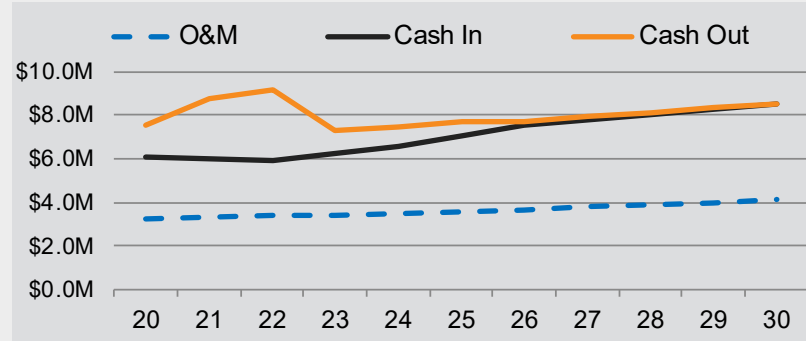
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2024	FY 2030
Sewer Rate Plan	0.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	3.00%	3.00%	3.00%	3.00%	23.87%	55.16%
All-In DSC	1.26	1.35	1.01	1.01	1.14	1.12	1.23	1.24	1.26	1.27	1.30	I/I Cash Fund	\$0

Violate Debt Coverage Requirement

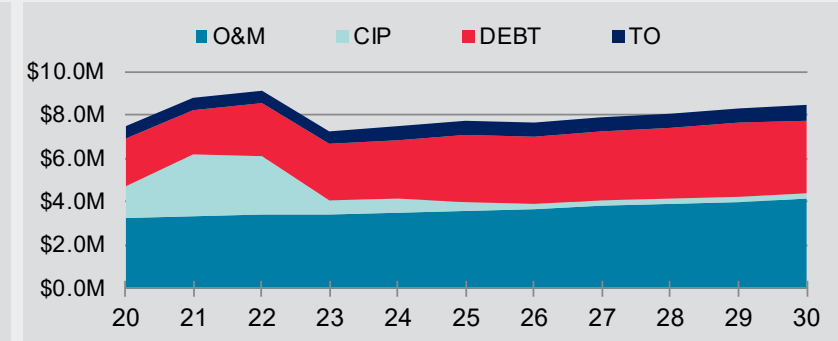
Operating Fund



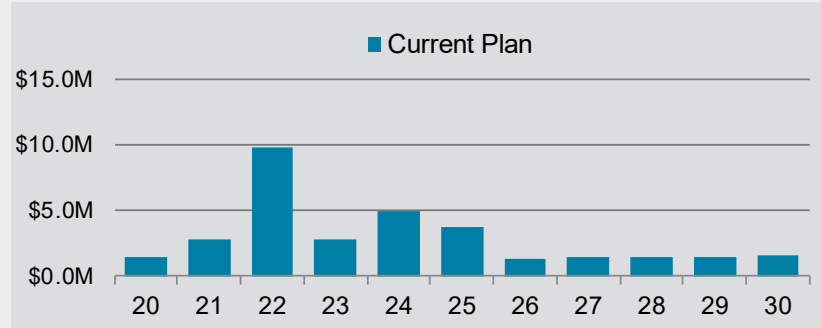
Revenues vs. Expenses



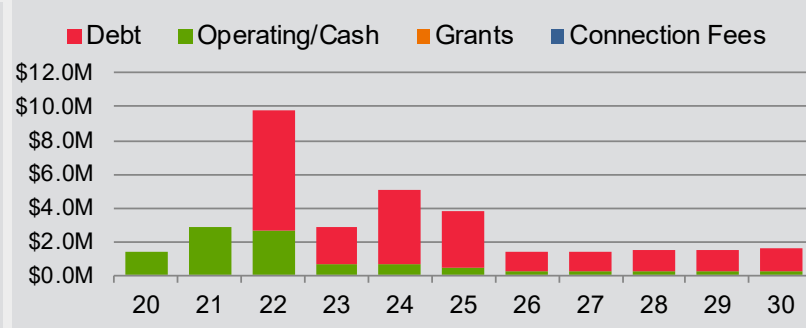
Expenses by Type



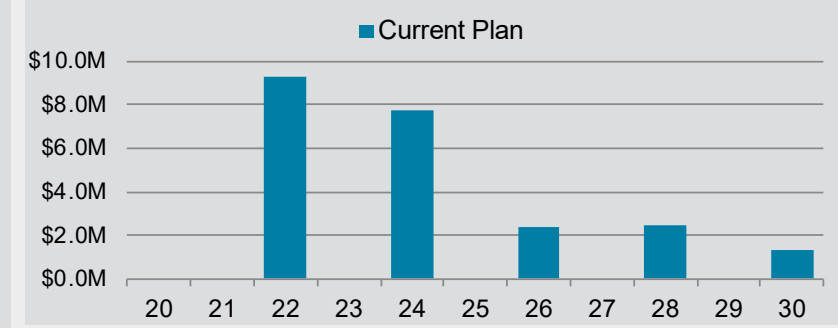
CIP Spending



CIP Funding



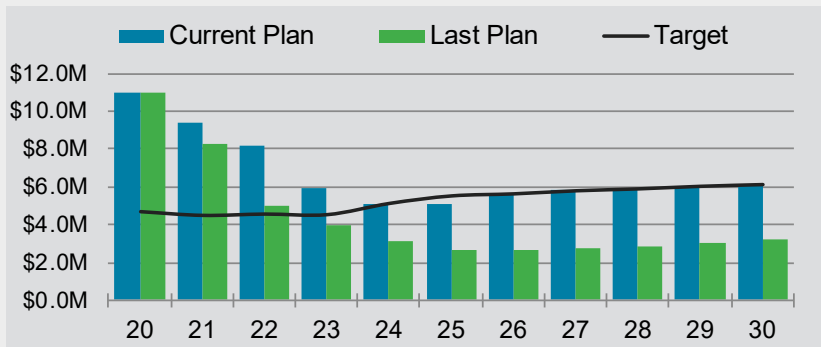
Borrowing



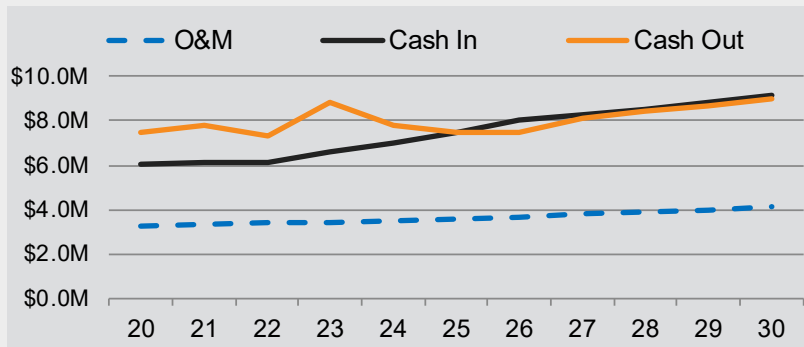
Rate Increases to Address Reductions

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2024	FY 2030
Sewer Rate Plan	0.00%	7.50%	7.50%	7.50%	6.00%	5.50%	5.50%	3.00%	3.00%	3.00%	3.00%	31.60%	64.81%
Last Plan	0.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	3.00%	3.00%	3.00%	3.00%	23.87%	55.16%
All-In DSC	1.26	1.41	1.36	1.62	1.40	1.37	1.50	1.51	1.56	1.58	1.64	I/I Cash Fund	\$0
Last Plan	1.26	1.35	1.01	1.10	1.17	1.21	1.33	1.33	1.35	1.35	1.39		

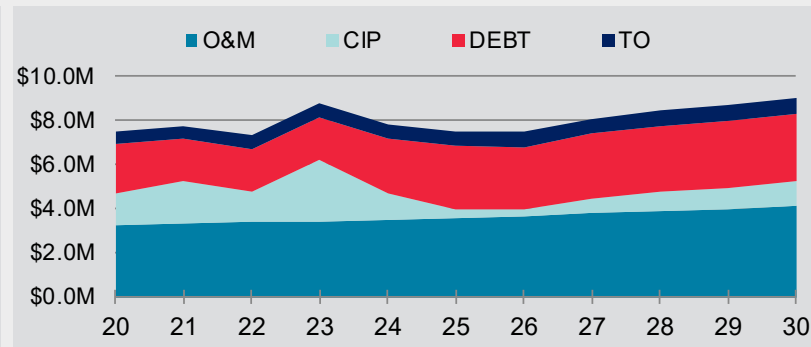
Operating Fund



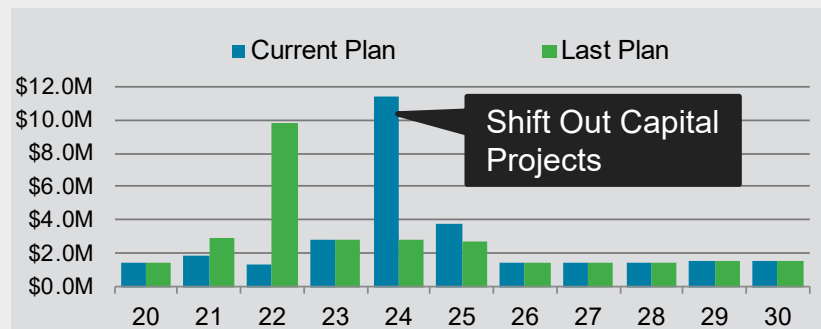
Revenues vs. Expenses



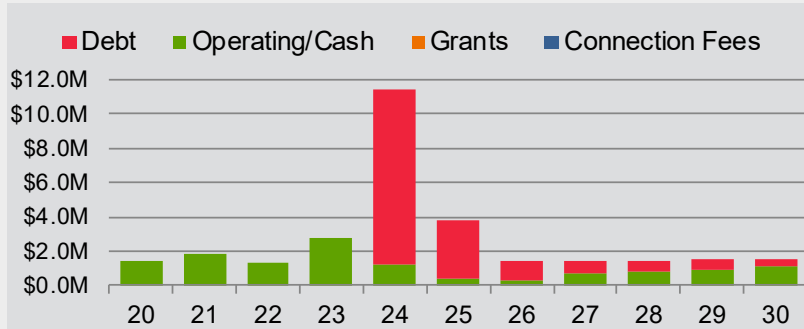
Expenses by Type



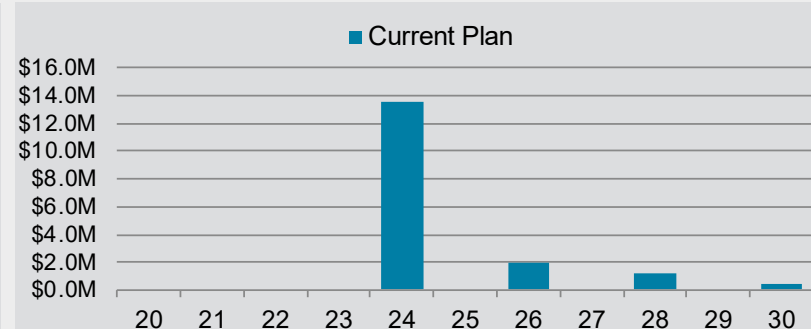
CIP Spending



CIP Funding



Borrowing





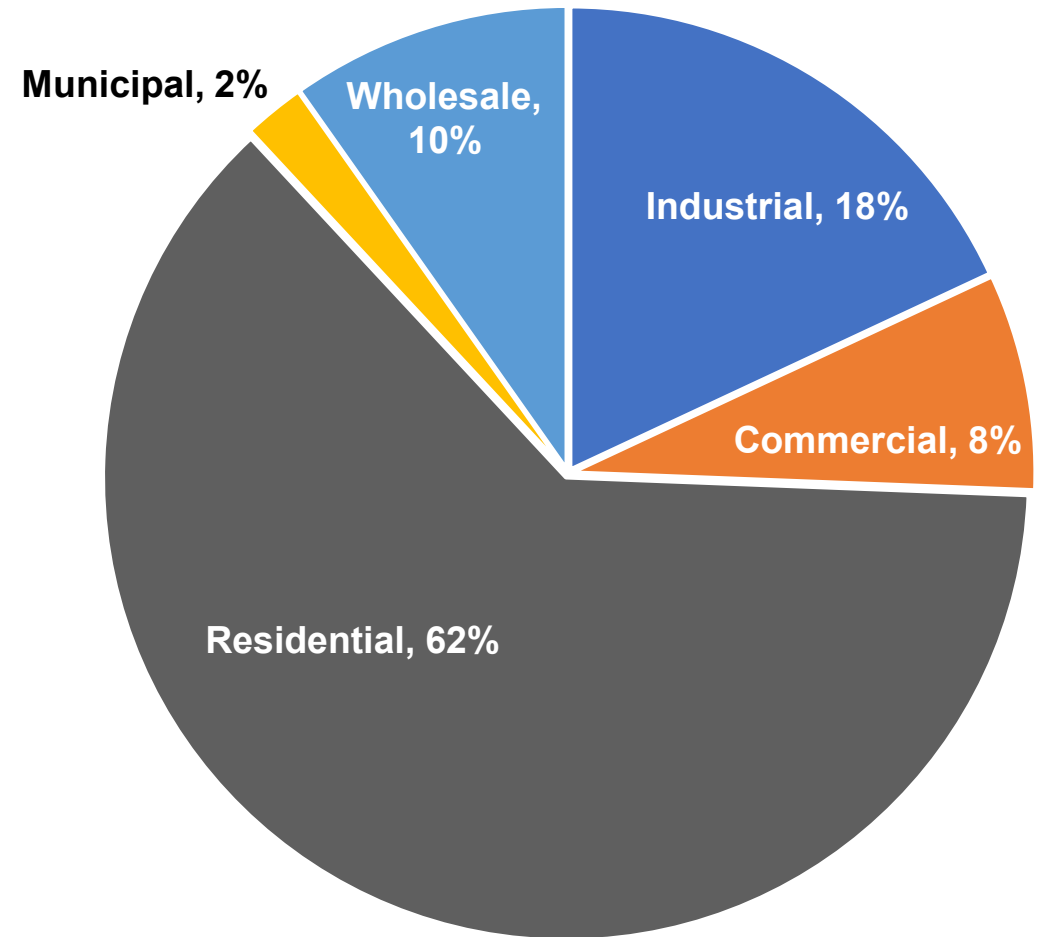
Case Study:
Springfield Water and
Sewer Commission

Springfield Water and Sewer Commission

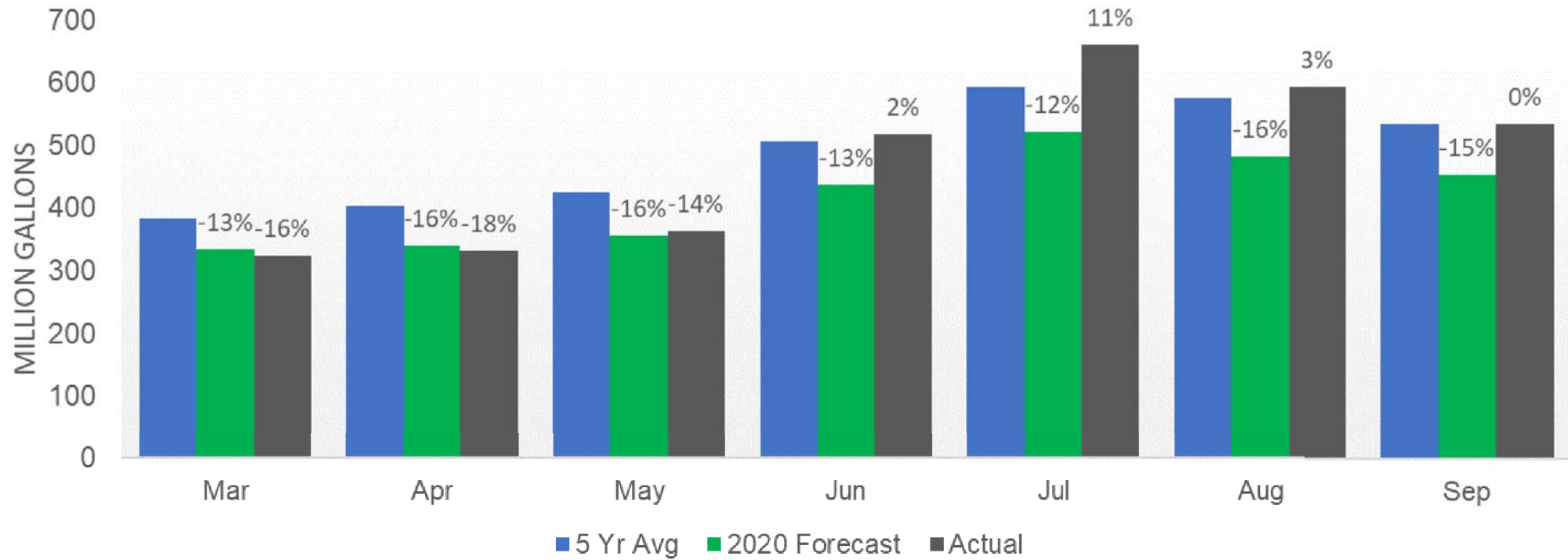
- Springfield Water and Sewer Commission was formed in 1996 and provides full water and sewer services to an estimated population of 250,000
- Springfield Regional Wastewater Treatment Facility is the second largest treatment facility in New England
- Majority of collection system is combined
- Stantec assists the Commission with annual financial planning and rate setting

Rates and Revenue Breakdown by Class

- Commission maintains water and sewer rates that are nearly 100% water consumption based
- Minimal account maintenance fee
- Uniform rates by class



Forecasting in March 2020



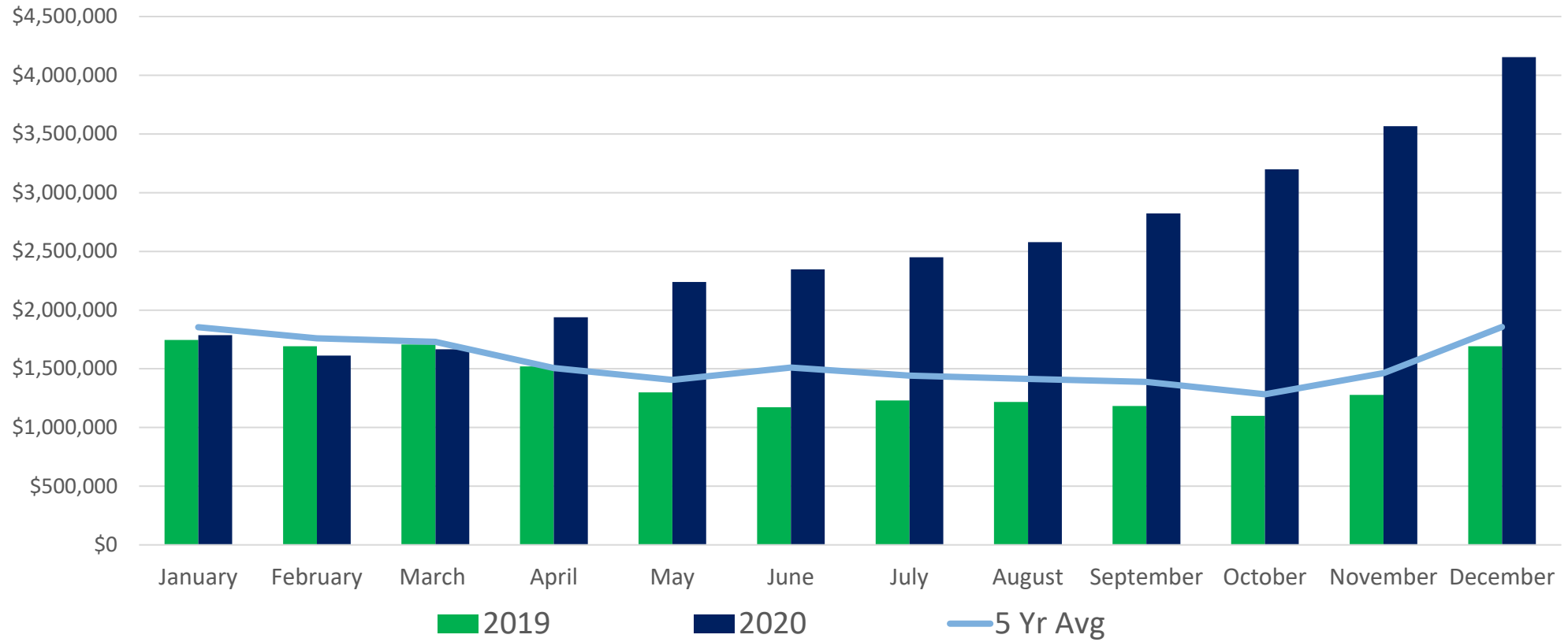
Forecasting Non-Payment

Forecasted usage will decrease for most classes and non-payments to rise

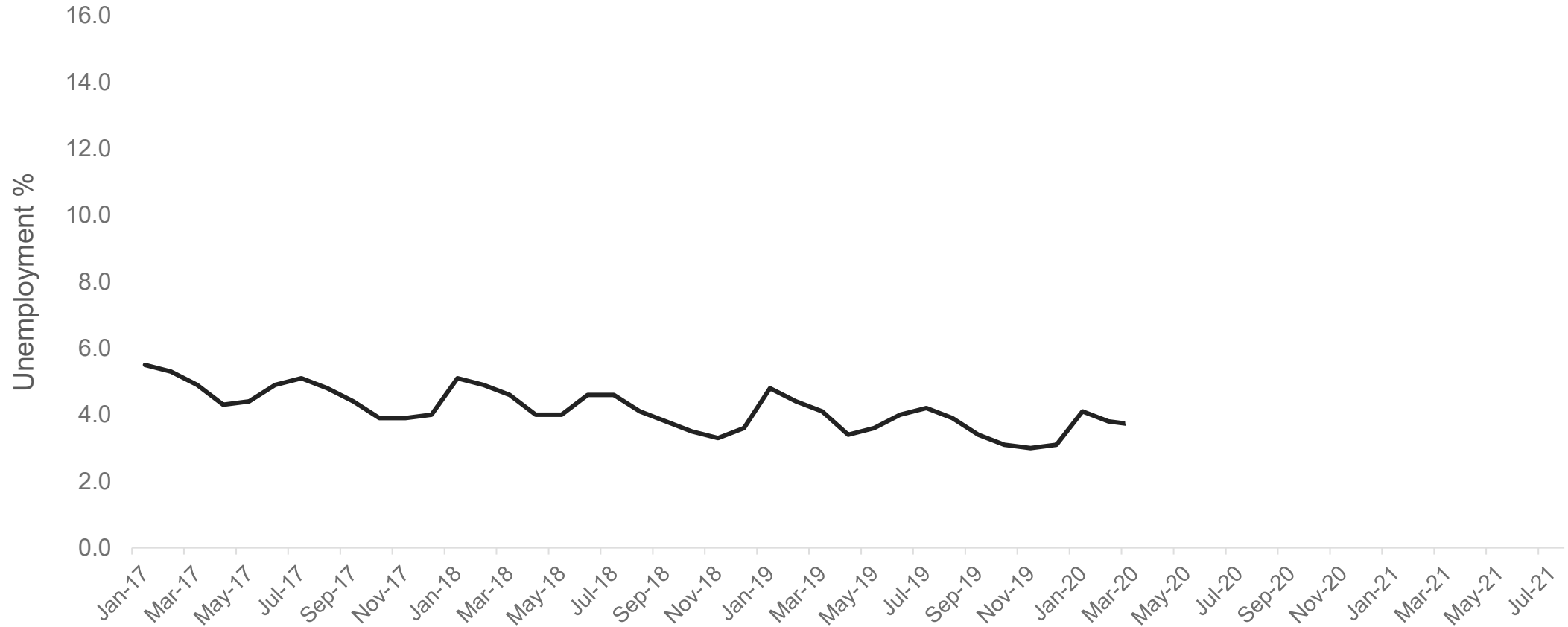
		Residential	Comm/Mun/Ind	Wholesale
3 Mo. FY 2020	Usage Change	-3%	-37%	-4%
	Non-Payment	+15%	+10%	0%
3 Mo. FY 2021	Usage Change	0%	-10%	0%
	Non-Payment	+15%	+8%	0%

Estimated non-payments to grow by 48% over first six months of pandemic

Accounts Receivable



Unemployment Trends



US Bureau of Labor Statistics, City of Springfield

Commission Strategy

- March/April 2020: Given needs of the system and forecasted impacts of Covid 9.5% increase in rates was adopted July 1, 2020
- FY 2021: Reduced operational and capital spending
- FY 2021: Use of rate stabilization reserves to meet near-term shortfalls
- FY 2022: Apply for and successfully received WIFIA loan of \$250 million to address system capital needs

Lessons Learned

- Over the past 18 months utilities have demonstrated their financial resiliency
- Higher fixed revenue rate structures, reserves and the ability to adjust course have all proven to be key elements
- The long-term impacts of reduce budgets and deferred capital may result in greater pressure on utilities in the coming years
- Federal funds (American Rescue Plan Act) may help to alleviate some of the is pressure



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