

Cost of Service Analysis *and* Water and Sewer Rate Impact

Public Works & Utilities/Strategic
Services

October 27, 2015



Cost of Service Analysis

- A study to evaluate the current fiscal status of the water and sewer utilities.
 - *Compares revenues to revenue requirements.*
 - *Changes consumption projections based on local and industrial trends.*
 - *Establishes water and sewer cost of service by customer class.*

Water Utilities Advisory Committee Ranking

Pricing Objectives Workshop	
Pricing Objective	Average (1=most important, 5 = least important)
1. Deferred System Maintenance	1.25
2. Rate Stability	1.50
3. Cost of Service Recovery	1.58
4. Revenue Stability	1.67
5. Conservation/Demand Management	1.75
6. Affordable to Disadvantaged Customers	2.67
7. Minimize Customer Impacts	2.67
8. Easy to Understand and Update	2.83
9. Equitable Contributions from New Customers	2.92
10. Easy to Implement	3.17
11. Economic Development through Water Rates	3.75

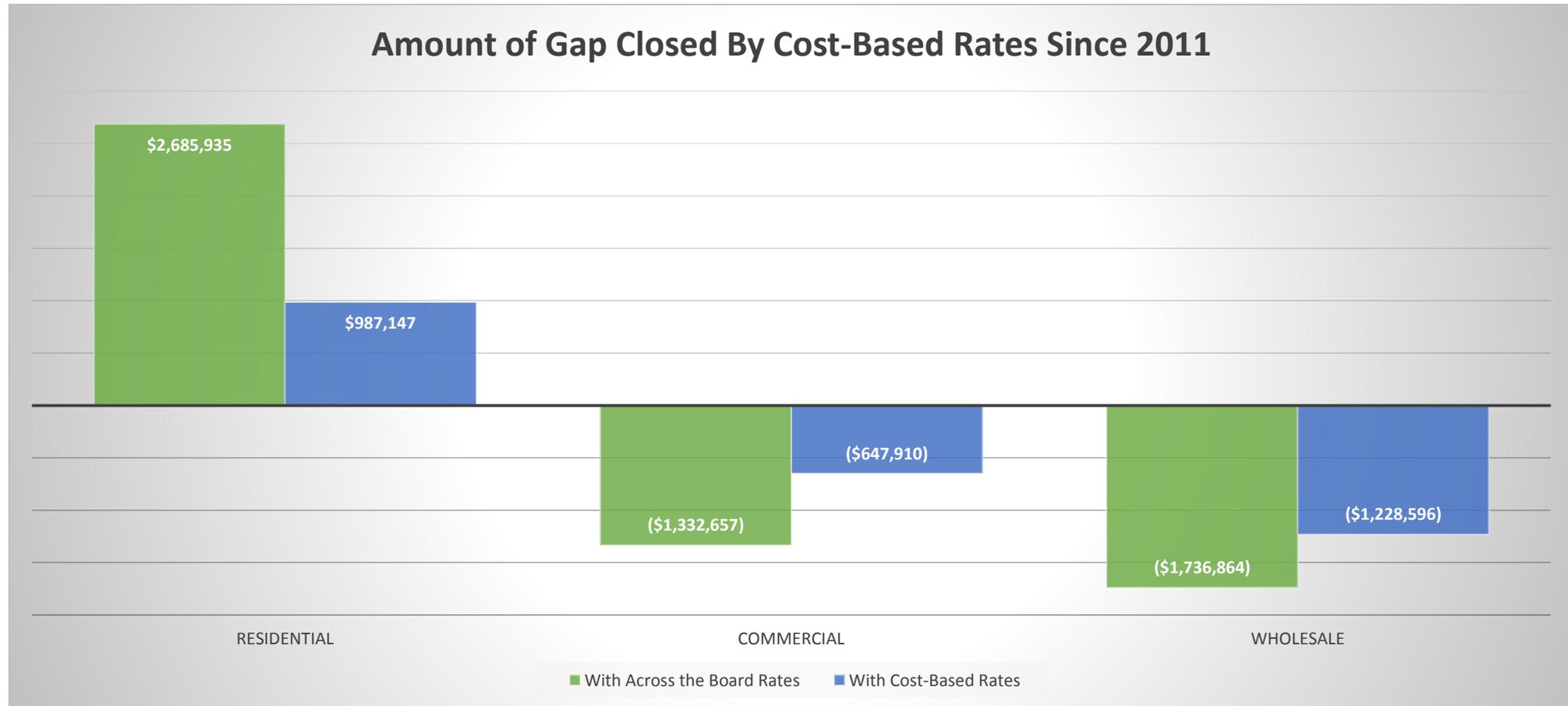
Activate Wichita

Survey Question	Pricing Objective	Agree	Disagree
Water rates should be reflective of your economic status	6		✓
Water rates should be lower for businesses to bring jobs to Wichita	11		✓
Water rates should be set at a level that pays for good infrastructure, regardless of the potential rate increase	1	✓	
New customers should pay extra to fund any new water supplies that may be needed	9		✓
Reducing water usage is more important than making sure monthly bills are low as possible	5	✓	

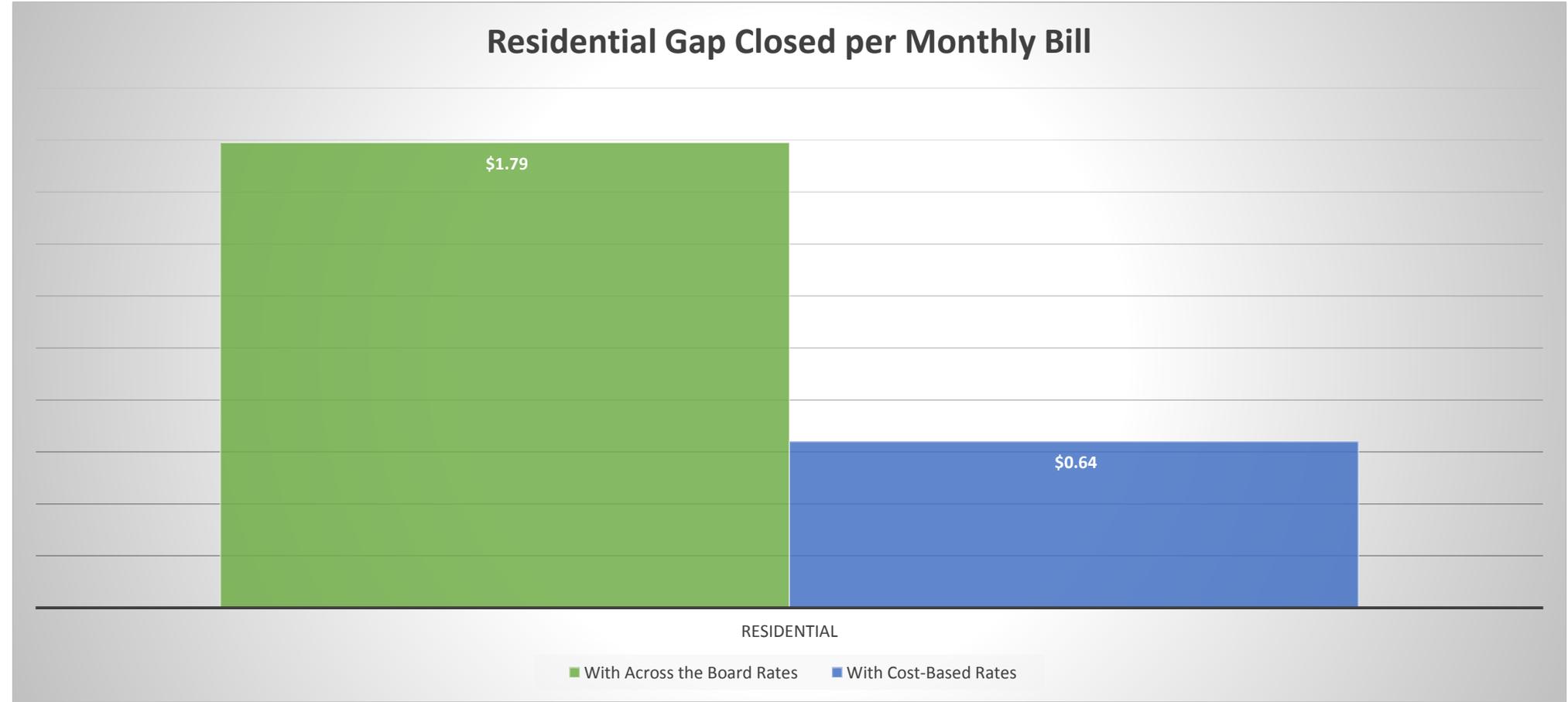
Cost Based Rates

- Analysis considers not only average gallons used, but the rate at which gallons are used.
- Different costs associated with supplying water at peak demand.
- 2011 COSA identified that residential customers were overpaying for water and sewer service, while commercial customers were underpaying.

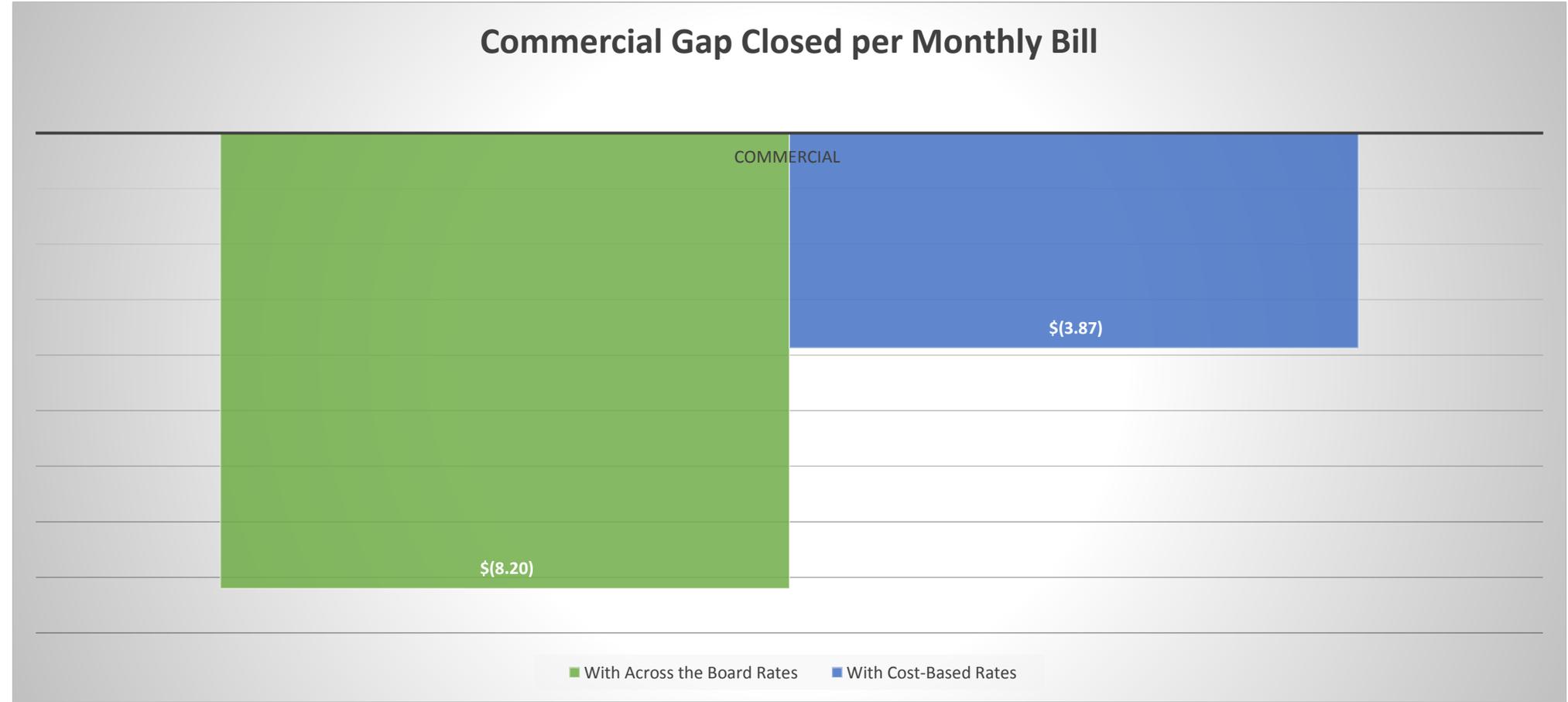
Closing the Gap



Closing the Gap



Closing the Gap



Closing the Gap

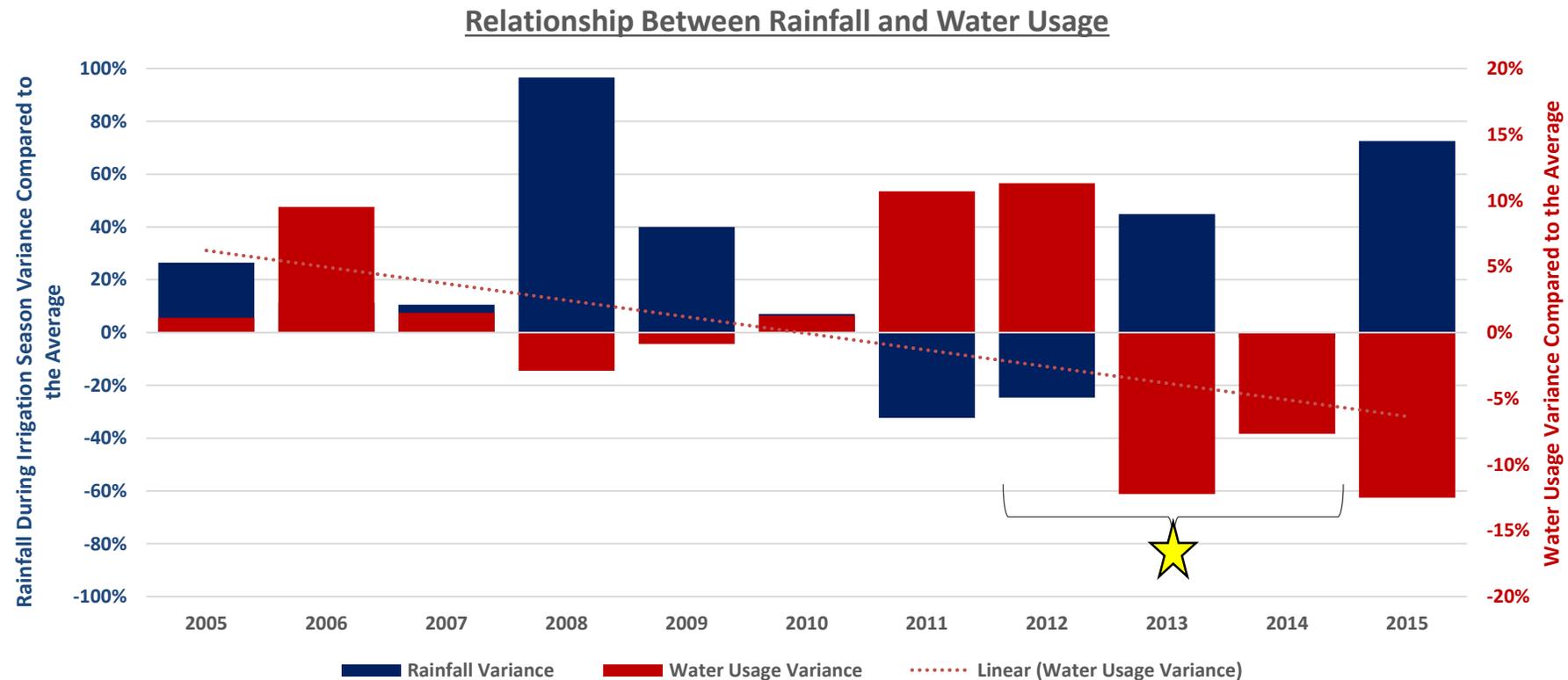
- The gap cannot be closed entirely without separate volumetric rate structures for residential and commercial customers.
- The current rate structure cannot detect changes in water uses between residential and commercial users.

Cost of Service Analysis Assumptions

2011 Cost of Service		2015 Cost of Service	
Customer Account Growth	.33%	.66%	
Conservation Rate	0%	.35%	
Interest Rate	6.0%	4.0%	2015
		4.5%	2016
		5.0%	2017
		5.5%	2018 and beyond

Cost of Service Analysis Assumptions

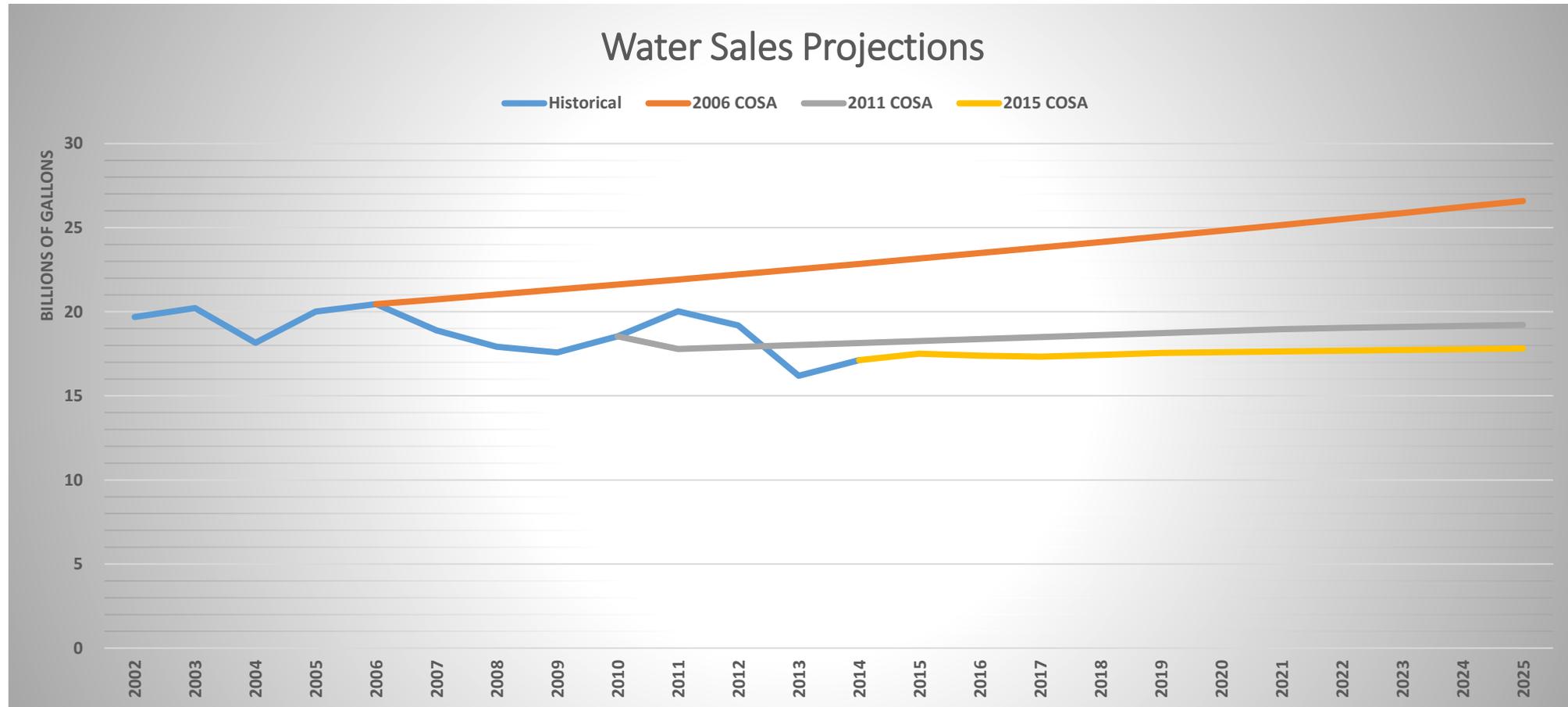
- 3 year consumption average (2012-2014)



Cost of Service Analysis Assumptions

Year	Consumption (Gallons)
2012	19,187,675,000
2013	16,194,236,000
2014	17,129,492,000
3 year average	17,503,801,000

Cost of Service Analysis Assumptions

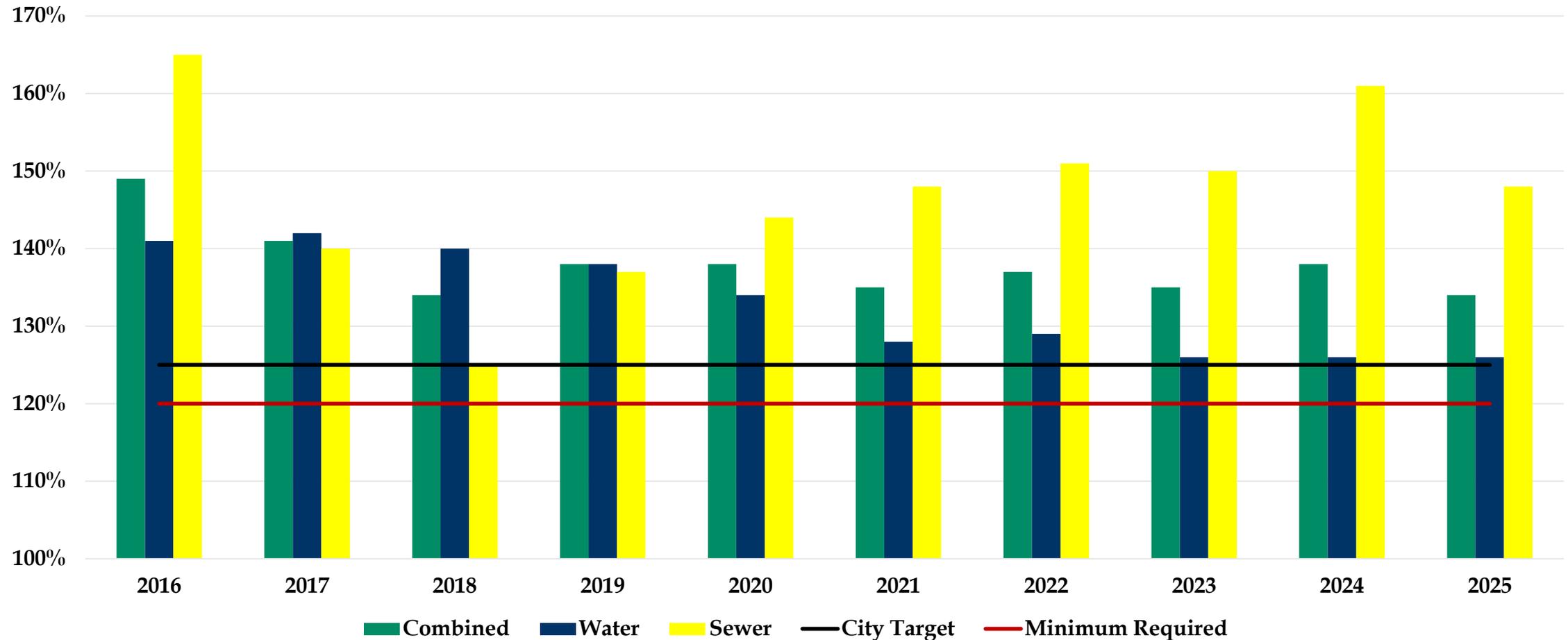


Revenue Impacts

Projected Revenue Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water	5.5%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Sewer	5.0%	5.0%	5.5%	5.0%	5.0%	4.5%	4.5%	4.5%	4.5%	3.0%

- Revenue increase estimates are the same as those presented to the City Council in 2014 due to reduction in interest rate assumptions.

Debt Service Coverage



Customer Impacts

Combined Monthly Water & Sewer Bills for 2016								
			Current	Proposed			Difference	
<u>Residential Customers</u>								
3,750 Gallons			\$39.04		\$41.05		\$2.01	5.10%
7,500 Gallons			\$62.38		\$65.55		\$3.17	5.10%
15,000 Gallons			\$136.26		\$143.08		\$6.83	5.00%
<u>Commercial Customers</u>								
100,000 Gallons			\$545.30		\$574.54		\$29.24	5.40%
<u>Industrial Customers</u>								
10 Million Gallons			\$50,994		\$53,539		\$2,545	5.00%

Measure of Affordability

2015 Combined Bill			
Residential (7,500g)	\$62.38	<i>National Average</i>	\$86.58
Commercial (100,000g)	\$545.30	<i>National Average</i>	\$1,061.67
Industrial (10,000,000g)	\$50,994	<i>National Average</i>	\$98,741

Alternative Rate Structures

- Scenario 1
 - Expand Block 1 from 110% of Average Winter Consumption up to include 125% of Average Winter Consumption
- Scenario 2
 - Create a 4th block by breaking the current Block 2 in half

Current Block		Proposed Block	
Block 1	<110%	Block 1	<110% AWC
Block 2	111%-310%	Block 2	111%-200% AWC
Block 3	>310% of AWC	Block 3	201%-310% of AWC
		Block 4	>310% of AWC

Alternative Rate Structures

- Revenue neutral, rate structure alternatives

Scenario	FY 2016 Rate Increase
Existing Structure	
Block 1: <110% of AWC	4.9%
Block 2: 111%-310% of AWC	4.9%
Block 3: >310% of AWC	4.9%
Scenario 1	
Block 1: < 125% of AWC	11.1%
Block 2: 126% - 310% of AWC	11.1%
Block 3: > 310% of AWC	11.1%
Scenario 2	
Block 1: < 110% of AWC	4.4%
Block 2: 111% - 200% of AWC	4.5%
Block 3: 200% - 310% of AWC	12.0%
Block 4: > 310% of AWC	4.4%

Price elasticity included for rate increases that are 10% or more, based on AWWA standards

Alternative Rate Structures

- Lifeline Rate
 - Eligibility based on income below the Federal Poverty Level
 - Approximately 17.6% residential customers within Wichita would qualify
 - Eligible for a 50% discount on minimum monthly charge

Alternative Rate Structures

- Revenue neutral, rate structure alternatives with a Lifeline Rate

Scenario	FY 2016 Rate Increase	FY 2016 Lifeline Rate Increase
Existing Structure		
Block 1: <110% of AWC	4.9%	6.6%
Block 2: 111%-310% of AWC	4.9%	6.6%
Block 3: >310% of AWC	4.9%	6.6%
Scenario 1		
Block 1: < 125% of AWC	11.1%	12.8%
Block 2: 126% - 310% of AWC	11.1%	12.8%
Block 3: > 310% of AWC	11.1%	12.8%
Scenario 2		
Block 1: < 110% of AWC	4.4%	6.1%
Block 2: 111% - 200% of AWC	4.5%	6.2%
Block 3: 200% - 310% of AWC	12.0%	13.8%
Block 4: > 310% of AWC	4.4%	6.1%

Price elasticity included for rate increases that are 10% or more, based on AWWA standards.

Cost of Service Analysis *and* Water and Sewer Rate Impact

Public Works & Utilities/Strategic Services

Serving You, In Many Ways, Every Day

