



FUTURE RATE SCENARIOS

WATER & SEWER UTILITIES

CITY COUNCIL WORKSHOP

FEBRUARY 28, 2012

Scenario #1: Base Case

This scenario funds all capital projects, including those that improve the existing system as well as initiatives aimed at serving growth areas. It features consistent increases over the next 10 years and is a continuation of the model used in last year's Cost of Service Analysis with adjustments to reflect 2011 revenues and refinance

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.72	1.77	1.61	1.26	1.33	1.28	1.26	1.29	1.32	1.37
	Rate Increase	5.0%	7.0%	7.0%	7.0%	5.0%	6.0%	5.0%	4.0%	4.0%	4.0%
Sewer	Debt Coverage Ratio	1.22	1.33	1.36	1.38	1.38	1.37	1.44	1.38	1.29	1.30
	Rate Increase	8.0%	7.0%	6.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.5%	4.5%
Comb.	Debt Coverage Ratio	1.50	1.58	1.51	1.30	1.35	1.31	1.32	1.32	1.31	1.35
	Rate Increase	6.2%	7.0%	6.6%	6.2%	5.0%	5.6%	5.0%	4.4%	4.2%	4.2%
2011 COSA Rates		6.2%	7.6%	7.2%	6.9%	5.6%	5.0%	5.0%	4.4%	3.6%	NA

Non-Growth Projects	\$688,966,918	New Water Revenue	\$46,997,793	Rate Increase Due to Inflation	25.9%
Growth Projects	\$227,072,506	New Sewer Revenue	\$30,755,991	Rate Increase Due to Infrastructure	43.8%
Total CIP Spending	\$916,039,424	Total New Revenue	\$77,753,784	Total 10-Year Rate Increase	69.7%

Advantages

- Repair and replacement projects would be emphasized by continuing a fully funded maintenance program over the next 10 years
- With \$227 million in growth projects, Wichita would be well-positioned to accommodate new development when it occurs
- This scenario continues the Cost of Service Analysis formulated in 2011 by an independent consultant
- Customers would have consistent, predictable rate increases each year, which alleviates the potential for notable spikes in rates

Disadvantages

- Does not minimize rate increases because it includes projects to encourage growth
- Includes a 43.8% increase in revenue over and above what is needed for inflationary increases for operating costs and to cover CIP debt service costs
- Requires City Council action to raise rates each year through 2022

Scenario #2: 3% O&M Reduction

This variation of the Base Case scenario would provide funding for all capital projects, including both growth and non-growth initiatives. However, it also assumes a 3% reduction in operating expenses compared to the Base Case scenario. Strategies for this operational savings have not yet been developed.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.81	1.84	1.66	1.30	1.37	1.30	1.26	1.28	1.29	1.32
	Rate Increase	6.0%	6.0%	6.0%	7.0%	5.0%	5.0%	4.0%	4.0%	3.0%	3.0%
Sewer	Debt Coverage Ratio	1.24	1.34	1.35	1.36	1.36	1.34	1.41	1.35	1.27	1.29
	Rate Increase	8.0%	6.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Comb.	Debt Coverage Ratio	1.56	1.63	1.54	1.32	1.36	1.31	1.31	1.31	1.28	1.31
	Rate Increase	6.8%	6.0%	5.6%	6.2%	5.0%	5.0%	4.4%	4.4%	3.8%	3.8%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$41,643,167	Rate Increase Due to Inflation	20.5%
Growth Projects	\$227,072,506	New Sewer Revenue	\$30,067,111	Rate Increase Due to Infrastructure	43.8%
Total CIP Spending	\$916,039,424	Total New Revenue	\$71,710,278	Total 10-Year Rate Increase	64.3%

Advantages

- The next 10 years would include repair and replacement projects through a fully funded maintenance programs
- The community would be able to respond to new development due to the inclusion of \$227 million in growth projects
- Like the Base Case scenario, these estimates include the Cost of Service Analysis assumptions from last year
- Annual rate increases would be predictably consistent, which would eliminate the potential for high spikes in customer charges

Disadvantages

- CIP expenses are higher compared to some of the other scenarios because this scenario funds projects that encourage growth
- Same as the Base Case scenario, this model would raise revenue by 43.8% over the next 10 years for infrastructure
- The City Council would be need to take action to raise rates each year through 2022

Scenario #3a: No CIP Projects

The following analysis illustrates the amounts required to finance infrastructure projects that have already been completed or are currently underway. No new CIP projects are factored into this estimate, so pursuing this scenario would eliminate all funding for capital maintenance and initiatives to accommodate new development.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.81	1.97	1.81	1.28	1.38	1.36	1.41	1.40	1.38	1.39
	Rate Increase	4.0%	4.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sewer	Debt Coverage Ratio	1.26	1.33	1.28	1.29	1.28	1.29	1.44	1.50	1.39	1.38
	Rate Increase	0.0%	0.0%	0.0%	1.0%	2.0%	2.0%	0.0%	0.0%	0.0%	1.0%
Comb.	Debt Coverage Ratio	1.58	1.71	1.61	1.28	1.35	1.34	1.42	1.41	1.38	1.38
	Rate Increase	2.4%	2.5%	2.8%	0.4%	0.7%	0.7%	0.0%	0.0%	0.0%	0.4%

Non-Growth Projects	\$0	New Water Revenue	\$8,861,266	Rate Increase Due to Inflation	25.9%
Growth Projects	\$0	New Sewer Revenue	\$2,666,329	Rate Increase Due to Infrastructure	-15.6%
Total CIP Spending	\$0	Total New Revenue	\$11,527,595	Total 10-Year Rate Increase	10.3%

Advantages

- This model includes the lowest possible rate increases through the next 10 years
- All increases are driven only by inflation for operating expenses because no new capital projects would be initiated
- Debt levels in both the water and sewer funds would decrease due to no future debt issuances

Disadvantages

- Does not provide any funding for replacement of aging infrastructure or improvement of the meter system
- Assumes that the EPA will not mandate the \$146 million Biological Nutrient Removal (BNR) project, which would spike rates when it is required
- Would result in major increases in the number of water main breaks and sewage backups due to not investing in the existing infrastructure
- System would gradually end up in far worse shape without any investment in the network of distribution and collection lines, water supply, and master planning
- No funds would be available to spur development through installation of new mains to serve growth areas

Scenario #3b: Delay Growth CIP for Two Years

This scenario funds, but delays by two years, all capital projects aimed at generating new development. Maintenance projects would continue on schedule to ensure proper care of the existing system.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.83	1.92	1.68	1.28	1.37	1.35	1.35	1.30	1.25	1.27
	Rate Increase	6.0%	6.0%	6.0%	6.0%	4.0%	4.0%	4.0%	3.0%	3.0%	3.0%
Sewer	Debt Coverage Ratio	1.29	1.36	1.33	1.32	1.33	1.34	1.42	1.33	1.26	1.33
	Rate Increase	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	6.0%	6.0%
Comb.	Debt Coverage Ratio	1.60	1.68	1.54	1.30	1.36	1.35	1.37	1.31	1.26	1.29
	Rate Increase	6.8%	6.8%	5.6%	5.6%	4.4%	4.4%	4.4%	3.8%	4.2%	4.2%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$37,533,987	Rate Increase Due to Inflation	25.9%
Growth Projects	\$195,014,470	New Sewer Revenue	\$32,889,220	Rate Increase Due to Infrastructure	37.3%
Total CIP Spending	\$883,981,388	Total New Revenue	\$70,423,207	Total 10-Year Rate Increase	63.2%

Advantages

- Maintenance on the existing system would not be delayed - this scenario would not delay any non-growth projects
- Delaying growth projects by two years may line up with when the local economy is in a position to support new development
- Customers would have generally consistent rates through 2022, with rates increases planned between 3.8% and 6.8%

Disadvantages

- The two-year delay of growth projects would leave the city in a poor position to respond if development activity picks up before 2014
- City Council action on annual rate increases would be needed each year, including by the end of this December

Scenario #4: No Growth Projects

Funding would be provided for all capital initiatives geared toward maintaining compliance with state and federal regulations, as well as repair and replacement efforts for the current system. No projects serving growth areas are included in the analysis.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.80	1.91	1.66	1.25	1.31	1.27	1.28	1.28	1.29	1.30
	Rate Increase	4.0%	4.0%	4.5%	5.5%	2.0%	2.5%	2.5%	2.0%	2.0%	2.0%
Sewer	Debt Coverage Ratio	1.25	1.35	1.33	1.29	1.27	1.25	1.32	1.30	1.27	1.35
	Rate Increase	5.5%	5.0%	4.0%	3.0%	4.0%	4.0%	5.0%	7.0%	7.5%	6.0%
Comb.	Debt Coverage Ratio	1.56	1.67	1.53	1.26	1.30	1.26	1.29	1.29	1.28	1.32
	Rate Increase	4.6%	4.4%	4.3%	4.5%	2.8%	3.1%	3.5%	4.0%	4.3%	3.7%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$24,220,700	Rate Increase Due to Inflation	25.9%
Growth Projects	\$0	New Sewer Revenue	\$27,967,436	Rate Increase Due to Infrastructure	20.9%
Total CIP Spending	\$688,966,918	Total New Revenue	\$52,188,136	Total 10-Year Rate Increase	46.8%

Advantages

- Lowers the amount needed for new capital by eliminating projects that encourage and support growth areas
- Offers significantly lower rate increases each year compared to the model that was presented as part of the Cost of Service Analysis
- Provides the funding necessary to adequately maintain the existing water and sewer infrastructure
- Slight majority of new revenue (25.9%) would be generated to support inflationary increases in operating costs

Disadvantages

- Does not include any funding for projects that the city needs in order to respond quickly to opportunities for new growth
- May result in the community losing new business opportunities due to the lack of immediate availability of new infrastructure
- Long-term water treatment capacity may be hindered because this scenario does not include funding for construction of a new treatment plant in northwest Wichita

Scenario #5a: No 2013 Increase (Full CIP)

The following analysis illustrates the effect of not adopting any rate increases in 2013. This scenario assumes that the full CIP would be funded, including projects aimed at serving new growth areas in the future.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.59	1.67	1.58	1.29	1.36	1.29	1.28	1.29	1.30	1.33
	Rate Increase	0.0%	9.5%	9.5%	9.5%	5.0%	5.0%	5.0%	3.0%	3.0%	3.0%
Sewer	Debt Coverage Ratio	1.05	1.22	1.30	1.38	1.38	1.37	1.42	1.35	1.26	1.26
	Rate Increase	0.0%	10.0%	9.0%	9.0%	5.0%	5.0%	4.0%	4.0%	5.0%	4.0%
Comb.	Debt Coverage Ratio	1.35	1.48	1.47	1.32	1.37	1.32	1.33	1.31	1.29	1.31
	Rate Increase	0.0%	9.7%	9.3%	9.3%	5.0%	5.0%	4.6%	3.4%	3.8%	3.4%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$44,949,644	Rate Increase Due to Inflation	25.9%
Growth Projects	\$227,072,506	New Sewer Revenue	\$30,520,642	Rate Increase Due to Infrastructure	41.8%
Total CIP Spending	\$916,039,424	Total New Revenue	\$75,470,286	Total 10-Year Rate Increase	67.7%

Advantages

- No City Council action on rates would be required until December 2013
- Current rates would be in effect from January 2012 until the beginning of 2014, providing customers with 24 months of stable rates
- This scenario fully funds growth and non-growth projects to ensure that maintenance and development needs are met

Disadvantages

- Raises the level of rates needed from 2014 - 2016 in order to fund the \$916 million in capital projects planned over the next 10 years
- Higher rates from 2014-2016 will account for permanent financing of ASR debt and for planning the BNR project

Scenario #5b: No 2013 Increase (With No Growth Projects)

No increases in 2013 are the basis of this scenario. It assumes that the City would only initiate projects that are unrelated to growth. However, projects that are aimed at meeting regulatory requirements and maintenance of the existing system would still be funded.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.68	1.83	1.64	1.26	1.32	1.29	1.29	1.30	1.31	1.33
	Rate Increase	0.0%	6.0%	6.0%	7.0%	2.0%	2.5%	2.5%	2.0%	2.0%	2.0%
Sewer	Debt Coverage Ratio	1.13	1.26	1.29	1.29	1.30	1.30	1.39	1.32	1.25	1.31
	Rate Increase	0.0%	7.0%	7.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Comb.	Debt Coverage Ratio	1.44	1.58	1.50	1.27	1.31	1.29	1.33	1.31	1.28	1.32
	Rate Increase	0.0%	6.4%	6.4%	6.2%	3.2%	3.5%	3.5%	3.2%	3.2%	3.3%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$24,979,950	Rate Increase Due to Inflation	25.9%
Growth Projects	\$0	New Sewer Revenue	\$26,570,613	Rate Increase Due to Infrastructure	20.3%
Total CIP Spending	\$688,966,918	Total New Revenue	\$51,550,563	Total 10-Year Rate Increase	46.2%

Advantages

- There would not be a rate increase in 2013, so no vote on rates would be needed until December 2013
- Minimizes capital costs by not including any projects related to new growth areas
- Customers would have 24 months of no increases to the current rate structure

Disadvantages

- ASR and BNR projects are the main drivers of higher increases between 2014 and 2016.
- Lack of growth projects in the CIP may stunt new development

Scenario #6: Catch-Up Increases

The following analysis shows the impact of adopting one more large increase in 2013 to link the rates with required capital spending. Increases from 2014 and beyond would be much smaller and based more on inflation than capital costs. Both growth and maintenance projects would be included in the CIP.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	2.13	2.13	1.87	1.38	1.42	1.31	1.25	1.25	1.25	1.27
	Rate Increase	20.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Sewer	Debt Coverage Ratio	1.54	1.62	1.61	1.60	1.57	1.51	1.56	1.44	1.30	1.27
	Rate Increase	23.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Comb.	Debt Coverage Ratio	1.87	1.91	1.77	1.45	1.47	1.38	1.34	1.31	1.27	1.27
	Rate Increase	21.2%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$38,481,520	Rate Increase Due to Inflation	25.9%
Growth Projects	\$227,072,506	New Sewer Revenue	\$26,304,543	Rate Increase Due to Infrastructure	32.2%
Total CIP Spending	\$916,039,424	Total New Revenue	\$64,786,063	Total 10-Year Rate Increase	58.1%

Advantages

- Eliminates the need for increases above inflation from 2014 - 2022
- Growth and non-growth capital projects are included in this model in order to maintain the system and to complement development

Disadvantages

- Next year would require a substantial increase to bring revenue up to levels that would enable inflation-only increases
- Rate shock in 2013 increase may not be bearable for some customers to absorb in a single year

Scenario #7: Biennial Increases

This scenario assumes that rate increases would not be instituted more than once every two years. It also would include both growth and maintenance CIP projects. With increases taking effect in 2012, the City Council would not need to decide on increases again until December 2013.

Financial Analysis

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water	Debt Coverage Ratio	1.91	1.79	1.80	1.28	1.44	1.28	1.32	1.27	1.33	1.31
	Rate Increase	12.0%	0.0%	14.0%	0.0%	10.0%	0.0%	8.0%	0.0%	6.0%	0.0%
Sewer	Debt Coverage Ratio	1.37	1.34	1.49	1.39	1.47	1.34	1.50	1.33	1.34	1.26
	Rate Increase	15.0%	0.0%	11.0%	0.0%	8.0%	0.0%	9.0%	0.0%	10.0%	0.0%
Comb.	Debt Coverage Ratio	1.67	1.60	1.68	1.32	1.45	1.30	1.37	1.29	1.34	1.29
	Rate Increase	13.2%	0.0%	12.8%	0.0%	9.2%	0.0%	8.4%	0.0%	7.6%	0.0%

Non-Growth Projects	\$688,966,918	New Water Revenue	\$41,346,635	Rate Increase Due to Inflation	25.9%
Growth Projects	\$227,072,506	New Sewer Revenue	\$28,396,064	Rate Increase Due to Infrastructure	36.6%
Total CIP Spending	\$916,039,424	Total New Revenue	\$69,742,699	Total 10-Year Rate Increase	62.5%

Advantages

- Requires City Council action on rates only once every 24 months, allowing customers to experience no increases every other year
- Includes full funding for growth and non-growth capital projects to ensure proper maintenance and quick ability to respond to development

Disadvantages

- Would result in substantial increases every two years - between 7.6% and 13.2% for combined water and sewer bills
- Rates are not as consistent and stable as what is included in other scenarios