

Broken Arrow Municipal Authority Financial Plan Scenarios FY2017 - FY2021

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Scenario 1					
Year	Water	Sewer	Stormwater	Combined	ERF Days
2017	9.0%	14.0%	15.0%	11.4%	45
2018	5.5%	7.0%	9.0%	6.5%	60
2019	5.5%	7.0%	9.0%	6.5%	75
2020	5.5%	7.0%	9.0%	6.5%	85
2021	5.5%	7.0%	9.0%	6.5%	94

Scenario 1 Assumptions:

- \$50,000,000 GO Bond issue in FY 2018 for water and wastewater projects
- Maintain the Emergency Reserve Fund balance from 2016 to 2017
- Achieve 90 days of O&M, capital outlay and debt service on FAP loans by 2021

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Scenario 2					
Year	Water	Sewer	Stormwater	Combined	ERF Days
2017	6.5%	9.5%	15.0%	8.6%	39
2018	6.5%	9.5%	9.0%	7.8%	48
2019	6.5%	9.0%	9.0%	7.7%	61
2020	6.5%	9.0%	9.0%	7.7%	74
2021	6.5%	9.0%	9.0%	7.7%	91

Scenario 2 Assumptions:

- \$50,000,000 GO Bond issue in FY 2018 for water and wastewater projects
- Allow the balance in the Emergency Reserve Fund to drop from 2016 to 2017 to smooth the revenue increases from 2017 to 2018
- Achieve 90 days of O&M, capital outlay and debt service on FAP loans by 2021

Broken Arrow Municipal Authority Proposed Water Rates FY2017 - FY2019

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Meter Size	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Existing		Effective December 1, 2016		Effective October 1, 2017		Effective October 1, 2018	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Service Charges - \$/Month								
3/4"	7.70	8.55	8.40	9.30	8.80	9.80	9.25	10.25
1"	8.50	9.45	9.25	10.30	9.75	10.80	10.20	11.35
1.5"	11.40	12.70	12.40	13.80	13.00	14.50	13.70	15.30
2"	16.20	18.00	17.70	19.60	18.50	20.60	19.50	21.60
3"	37.00	41.50	40.50	45.00	42.50	47.50	44.50	50.00
4"	61.00	68.50	66.50	74.50	70.00	78.50	73.50	82.50
6"	71.25	75.00	78.00	82.00	82.00	86.00	86.00	90.00
8"	101.25	106.75	110.00	116.00	116.00	122.00	122.00	128.00
10" and Over	135.75	143.00	148.00	156.00	155.00	164.00	163.00	172.00
Volume Charge - \$/Mgal								
Residential	4.00	4.66	4.38	5.10	4.63	5.39	4.89	5.70
Multi-Family	4.00		4.38		4.63		4.89	
Commercial	4.00	4.66	4.38	5.10	4.63	5.39	4.89	5.70
Park/Cem/Golf Courses	4.00		4.38		4.63		4.89	
Industrial	4.00							
Greens @ BA	4.00		4.38		4.63		4.89	

Broken Arrow Municipal Authority Proposed Water Rates FY2017 - FY2019

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Meter Size	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Existing		Effective December 1, 2016		Effective October 1, 2017		Effective October 1, 2018	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Service Charges - \$/Month								
3/4"	7.70	8.55	8.40	9.30	8.80	9.80	9.25	10.25
1"	8.50	9.45	9.25	10.30	9.75	10.80	10.20	11.35
1.5"	11.40	12.70	12.40	13.80	13.00	14.50	13.70	15.30
2"	16.20	18.00	17.70	19.60	18.50	20.60	19.50	21.60
3"	37.00	41.50	40.50	45.00	42.50	47.50	44.50	50.00
4"	61.00	68.50	66.50	74.50	70.00	78.50	73.50	82.50
6"	71.25	75.00	78.00	82.00	82.00	86.00	86.00	90.00
8"	101.25	106.75	110.00	116.00	116.00	122.00	122.00	128.00
10" and Over	135.75	143.00	148.00	156.00	155.00	164.00	163.00	172.00
Volume Charge - \$/Mgal								
Residential	4.00	4.66	4.25	4.95	4.55	5.30	4.86	5.66
Multi-Family	4.00		4.25		4.55		4.86	
Commercial	4.00	4.66	4.25	4.95	4.55	5.30	4.86	5.66
Park/Cem/Golf Courses	4.00		4.25		4.55		4.86	
Industrial	4.00							
Greens @ BA	4.00		4.25		4.55		4.86	

Broken Arrow Municipal Authority Typical Water Bills FY2017 - FY2019

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Description	Water Use	Existing Rates	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount	Increase	Increase	Amount	Increase	Increase	Amount	Increase	Increase
	Mgal	\$	\$	\$	%	\$	\$	%	\$	\$	%
Inside City											
Residential											
3/4"	0	7.70	8.40	0.70	9.09	8.80	1.10	14.29	9.25	1.55	20.13
3/4"	3	19.70	21.54	1.84	9.34	22.69	2.99	15.18	23.92	4.22	21.42
3/4"	5	27.70	30.30	2.60	9.39	31.95	4.25	15.34	33.70	6.00	21.66
3/4"	7	35.70	39.06	3.36	9.41	41.21	5.51	15.43	43.48	7.78	21.79
3/4"	10	47.70	52.20	4.50	9.43	55.10	7.40	15.51	58.15	10.45	21.91
3/4"	12	55.70	60.96	5.26	9.44	64.36	8.66	15.55	67.93	12.23	21.96
Commercial											
1"	0	8.50	9.25	0.75	8.82	9.75	1.25	14.71	10.20	1.70	20.00
1"	20	88.50	96.85	8.35	9.44	102.35	13.85	15.65	108.00	19.50	22.03
1"	50	208.50	228.25	19.75	9.47	241.25	32.75	15.71	254.70	46.20	22.16
2"	100	416.20	455.70	39.50	9.49	481.50	65.30	15.69	508.50	92.30	22.18
2"	250	1,016.20	1,112.70	96.50	9.50	1,176.00	159.80	15.73	1,242.00	225.80	22.22
4"	150	661.00	723.50	62.50	9.46	764.50	103.50	15.66	807.00	146.00	22.09
4"	300	1,261.00	1,380.50	119.50	9.48	1,459.00	198.00	15.70	1,540.50	279.50	22.16
6"	250	1,071.25	1,173.00	101.75	9.50	1,239.50	168.25	15.71	1,308.50	237.25	22.15
6"	400	1,671.25	1,830.00	158.75	9.50	1,934.00	262.75	15.72	2,042.00	370.75	22.18

Broken Arrow Municipal Authority Typical Water Bills FY2017 - FY2019

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Description	Water Use	Existing Rates	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount	Increase	Increase	Amount	Increase	Increase	Amount	Increase	Increase
	Mgal	\$	\$	\$	%	\$	\$	%	\$	\$	%
Inside City											
Residential											
3/4"	0	7.70	8.40	0.70	9.09	8.80	1.10	14.29	9.25	1.55	20.13
3/4"	3	19.70	21.15	1.45	7.36	22.45	2.75	13.96	23.83	4.13	20.96
3/4"	5	27.70	29.65	1.95	7.04	31.55	3.85	13.90	33.55	5.85	21.12
3/4"	7	35.70	38.15	2.45	6.86	40.65	4.95	13.87	43.27	7.57	21.20
3/4"	10	47.70	50.90	3.20	6.71	54.30	6.60	13.84	57.85	10.15	21.28
3/4"	12	55.70	59.40	3.70	6.64	63.40	7.70	13.82	67.57	11.87	21.31
Commercial											
1"	0	8.50	9.25	0.75	8.82	9.75	1.25	14.71	10.20	1.70	20.00
1"	20	88.50	94.25	5.75	6.50	100.75	12.25	13.84	107.40	18.90	21.36
1"	50	208.50	221.75	13.25	6.35	237.25	28.75	13.79	253.20	44.70	21.44
2"	100	416.20	442.70	26.50	6.37	473.50	57.30	13.77	505.50	89.30	21.46
2"	250	1,016.20	1,080.20	64.00	6.30	1,156.00	139.80	13.76	1,234.50	218.30	21.48
4"	150	661.00	704.00	43.00	6.51	752.50	91.50	13.84	802.50	141.50	21.41
4"	300	1,261.00	1,341.50	80.50	6.38	1,435.00	174.00	13.80	1,531.50	270.50	21.45
6"	250	1,071.25	1,140.50	69.25	6.46	1,219.50	148.25	13.84	1,301.00	229.75	21.45
6"	400	1,671.25	1,778.00	106.75	6.39	1,902.00	230.75	13.81	2,030.00	358.75	21.47

Broken Arrow Municipal Authority

Proposed Sewer Rates FY2017 - FY2019

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Meter Size	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Existing		Effective December 1, 2016		Effective October 1, 2017		Effective October 1, 2018	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Service Charges - \$/Month								
3/4"	7.50	8.10	8.20	8.85	8.60	9.25	9.00	9.75
1"	8.40	9.05	9.05	9.80	9.45	10.25	9.90	10.80
1.5"	11.50	12.50	12.10	13.10	12.70	13.70	13.30	14.50
2"	16.70	18.10	17.30	18.60	18.10	19.50	19.00	20.60
3"	39.50	43.00	39.50	42.50	41.50	45.00	43.50	47.50
4"	44.67	47.43	65.00	70.50	68.00	74.50	71.50	78.50
6"	44.67	47.43	76.00	78.00	80.00	82.00	84.00	86.00
8"	63.33	67.58	107.00	110.00	113.00	116.00	118.00	122.00
10"	83.62	89.37	144.00	148.00	152.00	156.00	159.00	164.00
Volume Charge - \$/mgal								
Retail/Residential	2.67	3.16	3.08	3.65	3.33	3.94	3.59	4.25
Non-Residential	2.91	3.32	3.36	3.83	3.63	4.14	3.91	4.47
Greens @ BA	2.67		3.08		3.33		3.59	
Contract	3.01		3.50		3.75		4.05	
Extra Strength								
BOD Charge: (\$/lb)	0.50		0.50	0.59	0.50	0.59	0.50	0.59
SS Charge: (\$/lb)	0.16		0.34	0.40	0.52	0.62	0.70	0.83
O&G Charge: (\$/lb)	0.16		0.16	0.19	0.16	0.19	0.16	0.19
Flat Service Charge	30.27	34.39	38.50	43.50	41.50	47.00	44.50	50.50

Broken Arrow Municipal Authority Proposed Sewer Rates FY2017 - FY2019

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Meter Size	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Existing		Effective December 1, 2016		Effective October 1, 2017		Effective October 1, 2018	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
Service Charges - \$/Month								
3/4"	7.50	8.10	8.20	8.85	8.60	9.25	9.00	9.75
1"	8.40	9.05	9.05	9.80	9.45	10.25	9.90	10.80
1.5"	11.50	12.50	12.10	13.10	12.70	13.70	13.30	14.50
2"	16.70	18.10	17.30	18.60	18.10	19.50	19.00	20.60
3"	39.50	43.00	39.50	42.50	41.50	45.00	43.50	47.50
4"	44.67	47.43	65.00	70.50	68.00	74.50	71.50	78.50
6"	44.67	47.43	76.00	78.00	80.00	82.00	84.00	86.00
8"	63.33	67.58	107.00	110.00	113.00	116.00	118.00	122.00
10"	83.62	89.37	144.00	148.00	152.00	156.00	159.00	164.00
Volume Charge - \$/mgal								
Retail/Residential	2.67	3.16	2.90	3.43	3.25	3.85	3.59	4.25
Non-Residential	2.91	3.32	3.16	3.60	3.54	4.04	3.91	4.47
Greens @ BA	2.67		2.90		3.25		3.59	
Contract	3.01		3.35		3.65		4.05	
Extra Strength								
BOD Charge: (\$/lb)	0.50		0.50	0.59	0.50	0.59	0.50	0.59
SS Charge: (\$/lb)	0.16		0.34	0.40	0.52	0.62	0.70	0.83
O&G Charge: (\$/lb)	0.16		0.16	0.19	0.16	0.19	0.16	0.19
Flat Service Charge	30.27	34.39	37.00	42.00	40.50	46.00	44.50	50.50

Broken Arrow Municipal Authority Typical Sewer Bills FY2017 - FY2019

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Description	Water Use Mgal	Existing Rates \$	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %
Inside City											
Residential											
3/4"	0	7.50	8.20	0.70	9.33	8.60	1.10	14.67	9.00	1.50	20.00
3/4"	3	15.51	17.44	1.93	12.44	18.59	3.08	19.86	19.77	4.26	27.47
3/4"	5	20.85	23.60	2.75	13.19	25.25	4.40	21.10	26.95	6.10	29.26
3/4"	7	26.19	29.76	3.57	13.63	31.91	5.72	21.84	34.13	7.94	30.32
3/4"	10	34.20	39.00	4.80	14.04	41.90	7.70	22.51	44.90	10.70	31.29
3/4"	12	39.54	45.16	5.62	14.21	48.56	9.02	22.81	52.08	12.54	31.71
Commercial											
1"	0	8.40	9.05	0.65	7.74	9.45	1.05	12.50	9.90	1.50	17.86
1"	20	66.60	76.25	9.65	14.49	82.05	15.45	23.20	88.10	21.50	32.28
1"	50	153.90	177.05	23.15	15.04	190.95	37.05	24.07	205.40	51.50	33.46
2"	100	307.70	353.30	45.60	14.82	381.10	73.40	23.85	410.00	102.30	33.25
2"	250	744.20	857.30	113.10	15.20	925.60	181.40	24.38	996.50	252.30	33.90
4"	150	481.17	569.00	87.83	18.25	612.50	131.33	27.29	658.00	176.83	36.75
4"	300	917.67	1,073.00	155.33	16.93	1,157.00	239.33	26.08	1,244.50	326.83	35.62
6"	250	772.17	916.00	143.83	18.63	987.50	215.33	27.89	1,061.50	289.33	37.47
6"	400	1,208.67	1,420.00	211.33	17.48	1,532.00	323.33	26.75	1,648.00	439.33	36.35

Broken Arrow Municipal Authority Typical Sewer Bills FY2017 - FY2019

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Description	Water Use Mgal	Existing Rates \$	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %
Inside City											
Residential											
3/4"	0	7.50	8.20	0.70	9.33	8.60	1.10	14.67	9.00	1.50	20.00
3/4"	3	15.51	16.90	1.39	8.96	18.35	2.84	18.31	19.77	4.26	27.47
3/4"	5	20.85	22.70	1.85	8.87	24.85	4.00	19.18	26.95	6.10	29.26
3/4"	7	26.19	28.50	2.31	8.82	31.35	5.16	19.70	34.13	7.94	30.32
3/4"	10	34.20	37.20	3.00	8.77	41.10	6.90	20.18	44.90	10.70	31.29
3/4"	12	39.54	43.00	3.46	8.75	47.60	8.06	20.38	52.08	12.54	31.71
Commercial											
1"	0	8.40	9.05	0.65	7.74	9.45	1.05	12.50	9.90	1.50	17.86
1"	20	66.60	72.25	5.65	8.48	80.25	13.65	20.50	88.10	21.50	32.28
1"	50	153.90	167.05	13.15	8.54	186.45	32.55	21.15	205.40	51.50	33.46
2"	100	307.70	333.30	25.60	8.32	372.10	64.40	20.93	410.00	102.30	33.25
2"	250	744.20	807.30	63.10	8.48	903.10	158.90	21.35	996.50	252.30	33.90
4"	150	481.17	539.00	57.83	12.02	599.00	117.83	24.49	658.00	176.83	36.75
4"	300	917.67	1,013.00	95.33	10.39	1,130.00	212.33	23.14	1,244.50	326.83	35.62
6"	250	772.17	866.00	93.83	12.15	965.00	192.83	24.97	1,061.50	289.33	37.47
6"	400	1,208.67	1,340.00	131.33	10.87	1,496.00	287.33	23.77	1,648.00	439.33	36.35

Broken Arrow Municipal Authority Proposed Stormwater Rates FY2017 - FY2019

Description	Existing	Effective December 1, 2016	Effective October 1, 2017	Effective October 1, 2018
	\$	\$	\$	\$
Service Charges - \$/ESU/Month (a)				
Residential	5.01	5.77	6.29	6.85
Non - Residential	5.01	5.77	6.29	6.85

(a) 1 Equivalent Stormwater Unit (ESU) is equal to 2,650 square feet of impervious area.

Broken Arrow Municipal Authority Typical Combined Bills FY2017 - FY2019

Scenario 1 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years

Description	Water Use Mgal	Existing Rates \$	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %
Inside City											
Residential (Includes Stormwater, 1 ESU per residence)											
3/4"	0	20.21	22.37	2.16	10.69	23.69	3.48	17.22	25.10	4.89	24.20
3/4"	3	40.22	44.75	4.53	11.26	47.57	7.35	18.27	50.54	10.32	25.66
3/4"	5	53.56	59.67	6.11	11.41	63.49	9.93	18.54	67.50	13.94	26.03
3/4"	7	66.90	74.59	7.69	11.49	79.41	12.51	18.70	84.46	17.56	26.25
3/4"	10	86.91	96.97	10.06	11.58	103.29	16.38	18.85	109.90	22.99	26.45
3/4"	12	100.25	111.89	11.64	11.61	119.21	18.96	18.91	126.86	26.61	26.54
Commercial (Does not include Stormwater)											
1"	0	16.90	18.30	1.40	8.28	19.20	2.30	13.61	20.10	3.20	18.93
1"	20	155.10	173.10	18.00	11.61	184.40	29.30	18.89	196.10	41.00	26.43
1"	50	362.40	405.30	42.90	11.84	432.20	69.80	19.26	460.10	97.70	26.96
2"	100	723.90	809.00	85.10	11.76	862.60	138.70	19.16	918.50	194.60	26.88
2"	250	1,760.40	1,970.00	209.60	11.91	2,101.60	341.20	19.38	2,238.50	478.10	27.16
4"	150	1,142.17	1,292.50	150.33	13.16	1,377.00	234.83	20.56	1,465.00	322.83	28.26
4"	300	2,178.67	2,453.50	274.83	12.61	2,616.00	437.33	20.07	2,785.00	606.33	27.83
6"	250	1,843.42	2,089.00	245.58	13.32	2,227.00	383.58	20.81	2,370.00	526.58	28.57
6"	400	2,879.92	3,250.00	370.08	12.85	3,466.00	586.08	20.35	3,690.00	810.08	28.13

Broken Arrow Municipal Authority Typical Combined Bills FY2017 - FY2019

Scenario 2 - GO Bond funding of \$50,000,000 available for Water and Wastewater in FY 2018 spread out over 5-years; smooth revenue increases

Description	Water Use Mgal	Existing Rates \$	Effective December 1, 2016			Effective October 1, 2017			Effective October 1, 2018		
			Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %	Amount \$	Increase \$	Increase %
Inside City											
Residential (Includes Stormwater, 1 ESU per residence)											
3/4"	0	20.21	22.37	2.16	10.69	23.69	3.48	17.22	25.10	4.89	24.20
3/4"	3	40.22	43.82	3.60	8.95	47.09	6.87	17.08	50.45	10.23	25.44
3/4"	5	53.56	58.12	4.56	8.51	62.69	9.13	17.05	67.35	13.79	25.75
3/4"	7	66.90	72.42	5.52	8.25	78.29	11.39	17.03	84.25	17.35	25.93
3/4"	10	86.91	93.87	6.96	8.01	101.69	14.78	17.01	109.60	22.69	26.11
3/4"	12	100.25	108.17	7.92	7.90	117.29	17.04	17.00	126.50	26.25	26.18
Commercial (Does not include Stormwater)											
1"	0	16.90	18.30	1.40	8.28	19.20	2.30	13.61	20.10	3.20	18.93
1"	20	155.10	166.50	11.40	7.35	181.00	25.90	16.70	195.50	40.40	26.05
1"	50	362.40	388.80	26.40	7.28	423.70	61.30	16.92	458.60	96.20	26.55
2"	100	723.90	776.00	52.10	7.20	845.60	121.70	16.81	915.50	191.60	26.47
2"	250	1,760.40	1,887.50	127.10	7.22	2,059.10	298.70	16.97	2,231.00	470.60	26.73
4"	150	1,142.17	1,243.00	100.83	8.83	1,351.50	209.33	18.33	1,460.50	318.33	27.87
4"	300	2,178.67	2,354.50	175.83	8.07	2,565.00	386.33	17.73	2,776.00	597.33	27.42
6"	250	1,843.42	2,006.50	163.08	8.85	2,184.50	341.08	18.50	2,362.50	519.08	28.16
6"	400	2,879.92	3,118.00	238.08	8.27	3,398.00	518.08	17.99	3,678.00	798.08	27.71