



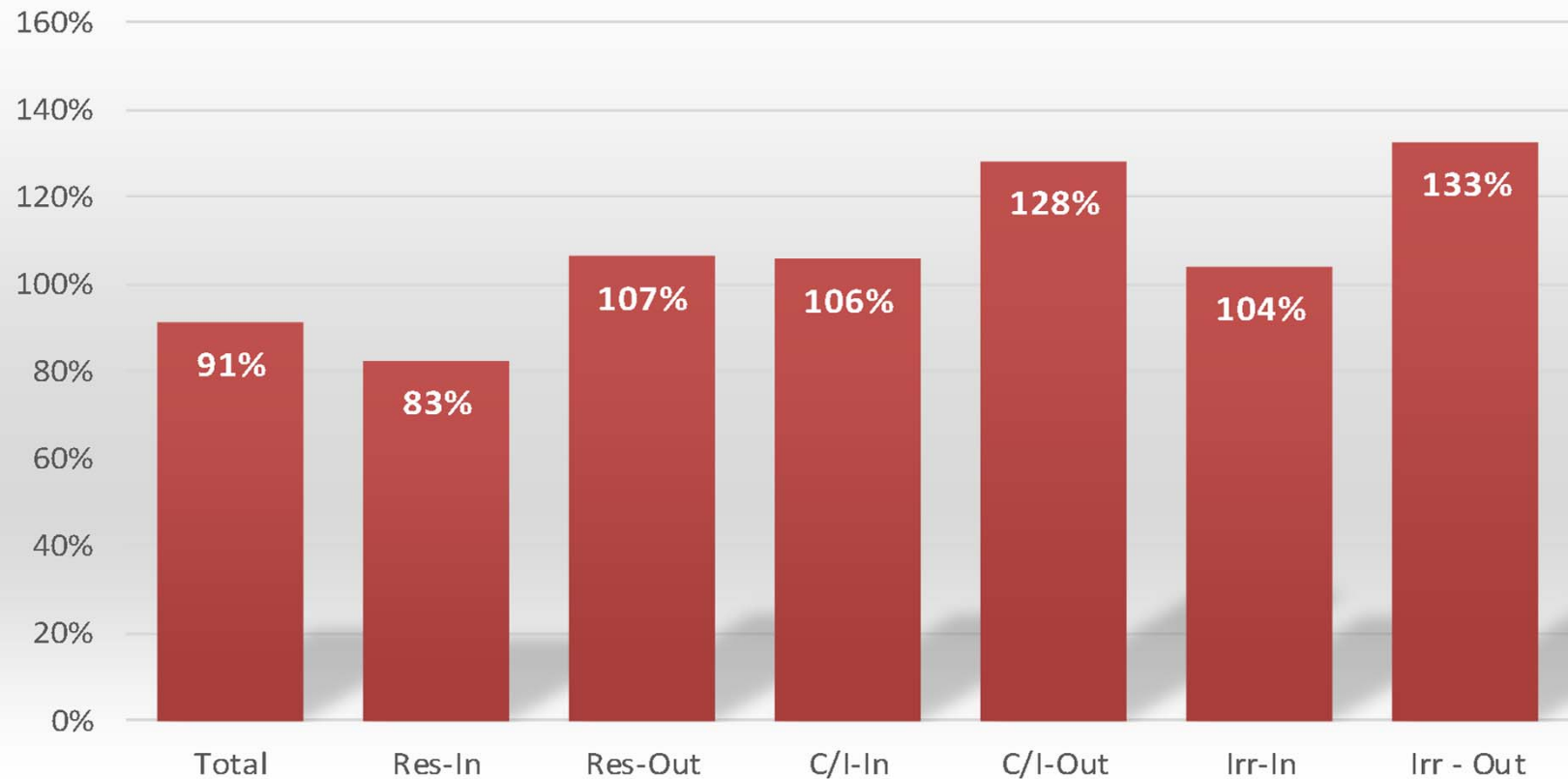
City of Franklin, TN Water Rate Recommendations

Presented: August 28, 2018
Jim Marshall | Jackson Thornton Utilities Consultants



Water – Cost of Service Results

Recovery by Rate Class

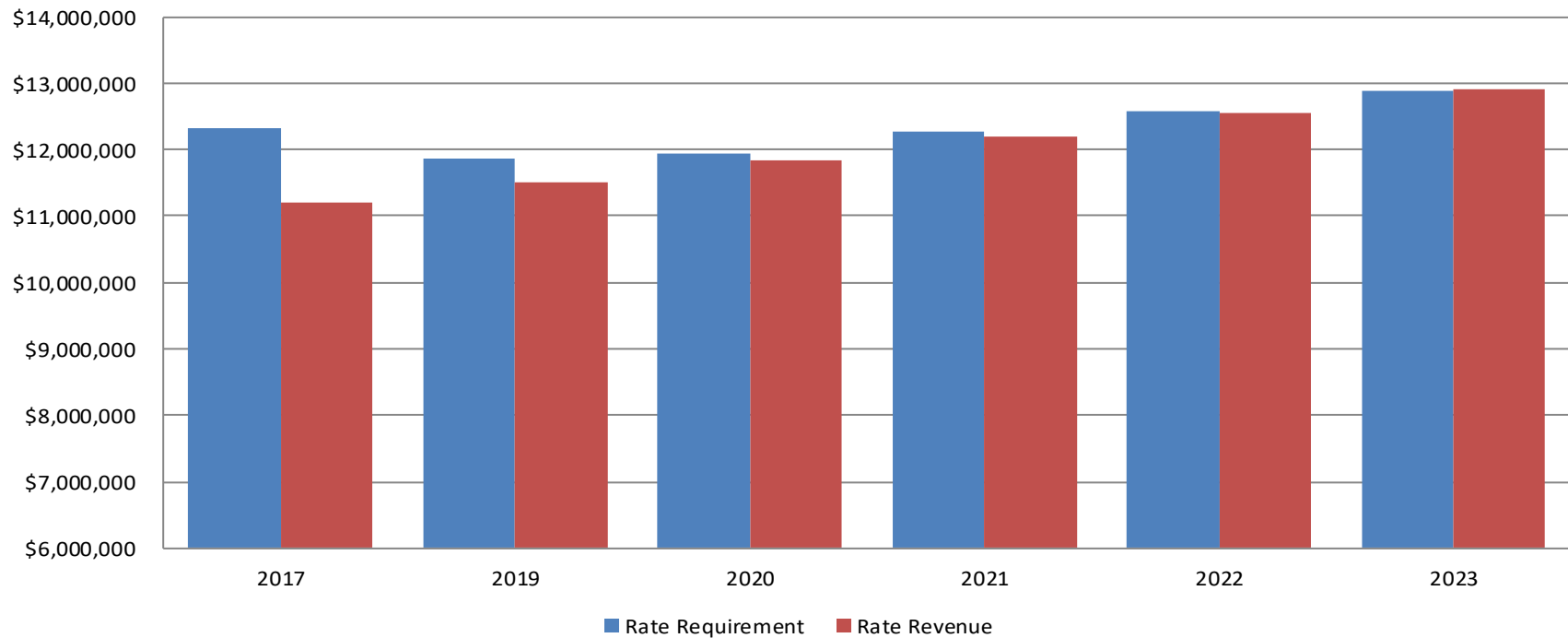


	Total	Res-In	Res-Out	C/I-In	C/I-Out	Irr-In	Irr - Out
Current Rate Revenue	\$ 11,192,969	\$ 6,375,892	\$ 1,759,189	\$ 2,008,467	\$ 197,943	\$ 703,047	\$ 148,430
Over/(Under) Recovery	\$ (1,131,543)	\$ (1,473,956)	\$ 115,674	\$ 116,600	\$ 44,581	\$ 28,022	\$ 37,536

Water – Five Year Approach

	Rate Requirement	% Change	\$ Change	Rate Revenue	Proposed Rate Change	Additional Revenue	Revenue - Requirement
Actual 2017	\$ 12,324,511			\$11,192,969			\$ (1,131,543)
Budget 2019	\$ 11,877,570	-3.6%	\$ (446,941)	\$11,517,565	2.90%	\$ 324,596	\$ (360,005)
Budget 2020	\$ 11,950,803	0.6%	\$ 73,233	\$11,851,574	2.90%	\$ 334,009	\$ (99,229)
Budget 2021	\$ 12,262,686	2.6%	\$ 311,883	\$12,195,270	2.90%	\$ 343,696	\$ (67,416)
Budget 2022	\$ 12,575,523	2.6%	\$ 312,837	\$12,548,933	2.90%	\$ 353,663	\$ (26,590)
Budget 2023	\$ 12,893,459	2.5%	\$ 317,936	\$12,912,852	2.90%	\$ 363,919	\$ 19,393

5 Year Rate Requirement Timeline



Water Rate Option A – Customer Charge Increase

Option A

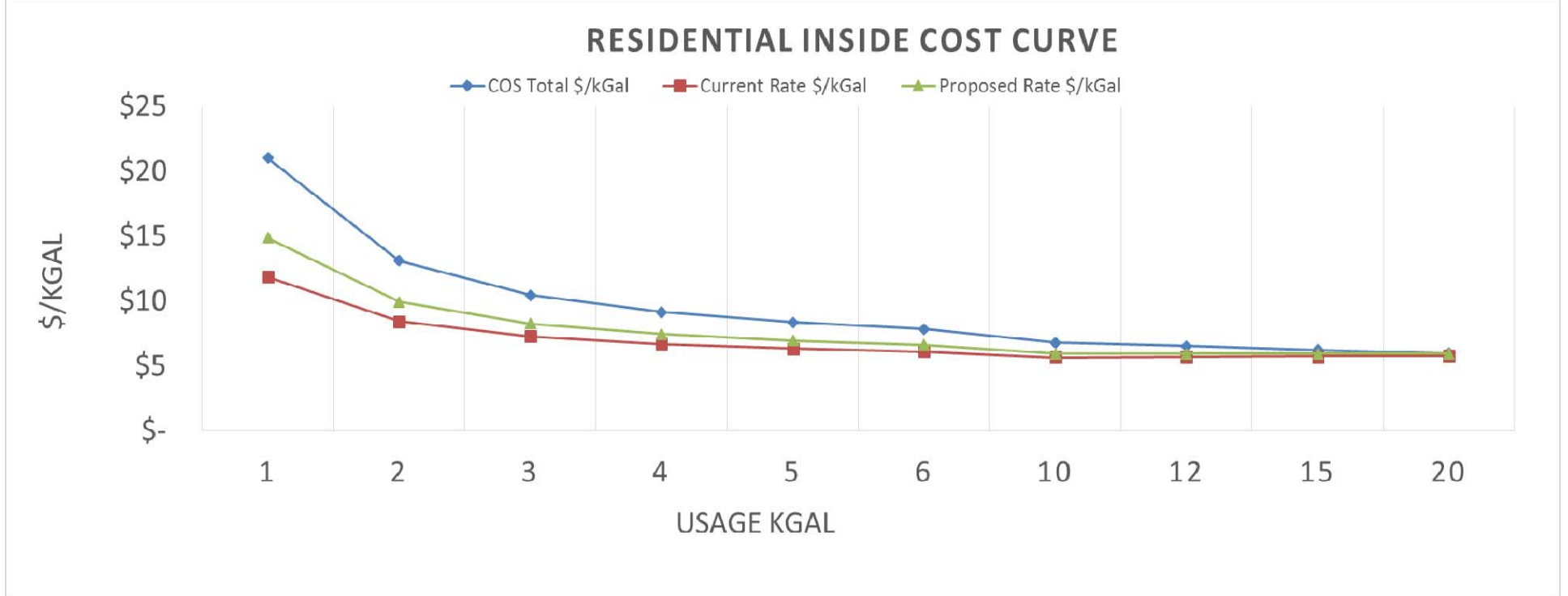
Two Year Rate Plan:

- Increase the monthly Customer Charge by \$1.50 each of the next two years for each rate class.

Option A would generate approximately \$654,000 in additional revenue over the two year period.

Water – Option A Residential Inside

	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge (includes 1,000 Gal)	\$ 15.80	\$ 11.86	\$ 14.86	\$ 3.00
Next 9,000 Gallons	\$ 5.19	\$ 4.96	\$ 4.96	\$ -
Next 15,000 Gallons		\$ 5.89	\$ 5.89	\$ -
All Additional Usage		\$ 6.82	\$ 6.82	\$ -



Water – Option A Residential Inside

Usage		COS Rates	Current Rates	Proposed Rates	Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal
	1	\$ 20.99	\$ 11.86	\$ 14.86	\$ 3.00	\$ 0.10	\$ 11.86	\$ 14.86
	2	\$ 26.18	\$ 16.82	\$ 19.82	\$ 3.00	\$ 0.10	\$ 8.41	\$ 9.91
	3	\$ 31.37	\$ 21.78	\$ 24.78	\$ 3.00	\$ 0.10	\$ 7.26	\$ 8.26
	4	\$ 36.56	\$ 26.74	\$ 29.74	\$ 3.00	\$ 0.10	\$ 6.69	\$ 7.44
	5	\$ 41.75	\$ 31.70	\$ 34.70	\$ 3.00	\$ 0.10	\$ 6.34	\$ 6.94
	6	\$ 46.94	\$ 36.66	\$ 39.66	\$ 3.00	\$ 0.10	\$ 6.11	\$ 6.61
	10	\$ 67.70	\$ 56.50	\$ 59.50	\$ 3.00	\$ 0.10	\$ 5.65	\$ 5.95
	12	\$ 78.08	\$ 68.28	\$ 71.28	\$ 3.00	\$ 0.10	\$ 5.69	\$ 5.94
	15	\$ 93.65	\$ 85.95	\$ 88.95	\$ 3.00	\$ 0.10	\$ 5.73	\$ 5.93
	20	\$ 119.60	\$ 115.40	\$ 118.40	\$ 3.00	\$ 0.10	\$ 5.77	\$ 5.92
Average Usage			5,936					

Water Rate Option B – Customer Charge and Consumption Charge Increase

Option B

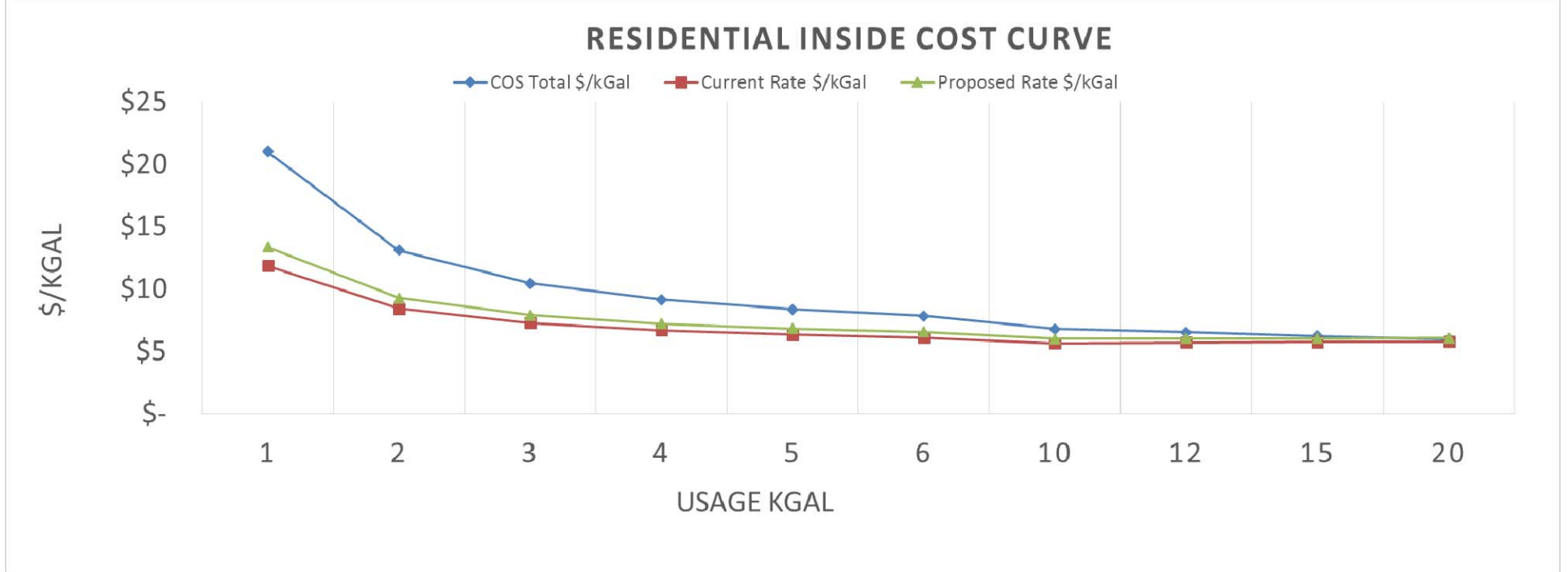
Two Year Rate Plan:

- Increase the monthly Customer Charge by \$0.75 each of the next two years for each rate class.
- Increase the Volumetric Charge by \$0.11 each of the next two years for each rate class.

Option B would generate approximately \$644,000 in additional revenue over the two year period.

Water – Option B Residential Inside

	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge (includes 1,000 Gal)	\$ 15.80	\$ 11.86	\$ 13.36	\$ 1.50
Next 9,000 Gallons	\$ 5.19	\$ 4.96	\$ 5.18	\$ 0.22
Next 15,000 Gallons		\$ 5.89	\$ 6.11	\$ 0.22
All Additional Usage		\$ 6.82	\$ 7.04	\$ 0.22



Water – Option B Residential Inside

Usage		COS Rates	Current Rates	Proposed Rates	Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal
	1	\$ 20.99	\$ 11.86	\$ 13.36	\$ 1.50	\$ 0.05	\$ 11.86	\$ 13.36
	2	\$ 26.18	\$ 16.82	\$ 18.54	\$ 1.72	\$ 0.06	\$ 8.41	\$ 9.27
	3	\$ 31.37	\$ 21.78	\$ 23.72	\$ 1.94	\$ 0.06	\$ 7.26	\$ 7.91
	4	\$ 36.56	\$ 26.74	\$ 28.90	\$ 2.16	\$ 0.07	\$ 6.69	\$ 7.23
	5	\$ 41.75	\$ 31.70	\$ 34.08	\$ 2.38	\$ 0.08	\$ 6.34	\$ 6.82
	6	\$ 46.94	\$ 36.66	\$ 39.26	\$ 2.60	\$ 0.09	\$ 6.11	\$ 6.54
	10	\$ 67.70	\$ 56.50	\$ 59.98	\$ 3.48	\$ 0.12	\$ 5.65	\$ 6.00
	12	\$ 78.08	\$ 68.28	\$ 72.20	\$ 3.92	\$ 0.13	\$ 5.69	\$ 6.02
	15	\$ 93.65	\$ 85.95	\$ 90.53	\$ 4.58	\$ 0.15	\$ 5.73	\$ 6.04
	20	\$ 119.60	\$ 115.40	\$ 121.08	\$ 5.68	\$ 0.19	\$ 5.77	\$ 6.05
Average Usage		5,936						

Water – Summary of Rate Options

Option A				
	Customer Charge Increase	Revenue Generated		Total Revenue Generated
Year 1	\$ 1.50	\$ 326,949		\$ 326,949
Year 2	\$ 1.50	\$ 326,949		\$ 326,949
		<u>\$ 653,898</u>		<u>\$ 653,898</u>

Option B						
	Customer Charge Increase	Revenue Generated		Volumetric Charge Increase	Revenue Generated	Total Revenue Generated
Year 1	\$ 0.75	\$ 163,475		\$ 0.11	\$ 158,518	\$ 321,993
Year 2	\$ 0.75	\$ 163,475		\$ 0.11	\$ 158,518	\$ 321,993
		<u>\$ 326,949</u>			<u>\$ 317,036</u>	<u>\$ 643,985</u>



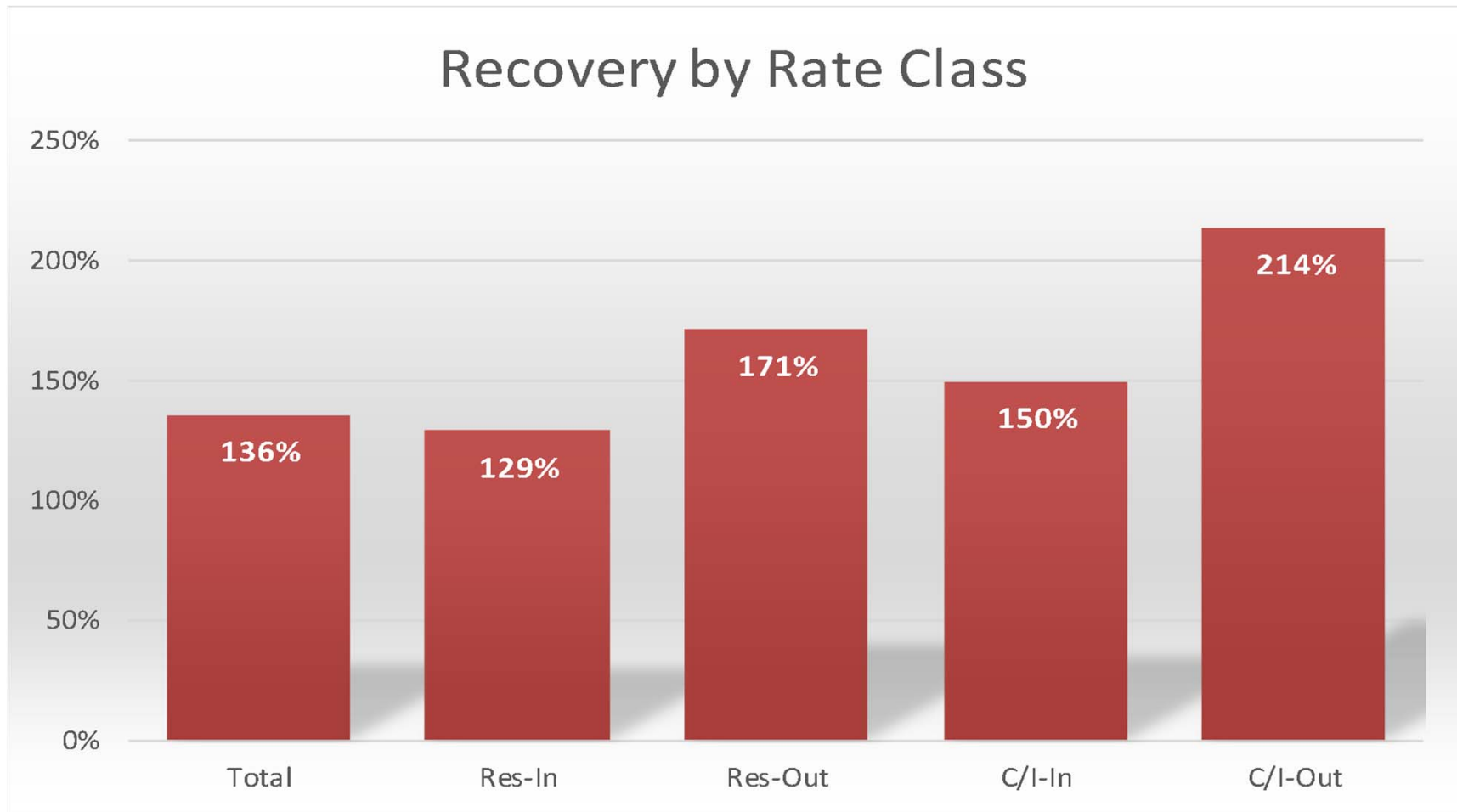
City of Franklin, TN

Sewer Rate Recommendations

Presented: August 28, 2018
Jim Marshall | Jackson Thornton Utilities Consultants



Sewer – Cost of Service Results

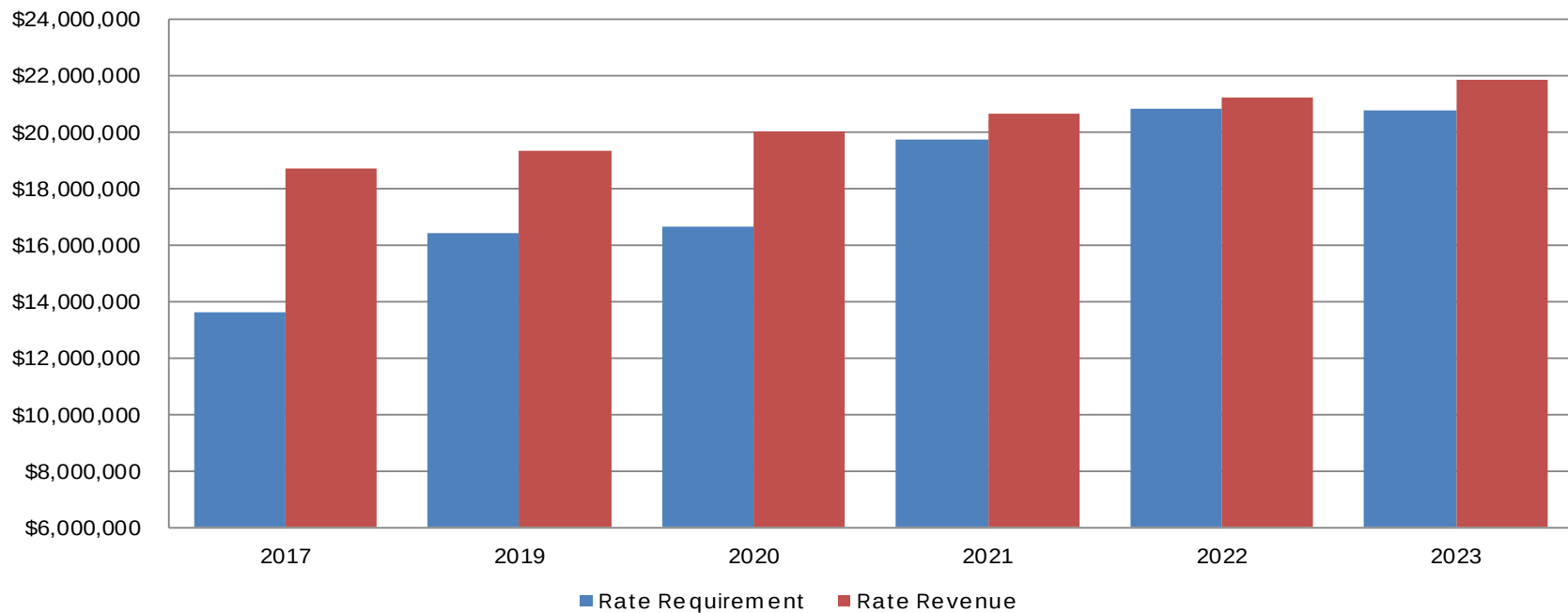


	Total	Res-In	Res-Out	C/I-In	C/I-Out
Current Rate Revenue	\$ 18,676,471	\$ 12,732,237	\$ 400,378	\$ 5,197,885	\$ 345,971
Over/(Under) Recovery	\$ 5,082,180	\$ 2,972,621	\$ 171,494	\$ 1,752,105	\$ 185,959

Sewer – Five Year Approach

	Rate Requirement	% Change	\$ Change	Rate Revenue	Proposed Rate Change	Additional Revenue	Revenue - Requirement
Actual 2017	\$ 13,594,291			\$18,676,471			\$ 5,082,180
Budget 2019	\$ 16,405,660	20.7%	\$ 2,811,369	\$19,330,147	3.50%	\$ 653,676	\$ 2,924,487
Budget 2020	\$ 16,630,587	1.4%	\$ 224,927	\$20,006,702	3.50%	\$ 676,555	\$ 3,376,115
Budget 2021	\$ 19,713,962	18.5%	\$ 3,083,375	\$20,606,903	3.00%	\$ 600,201	\$ 892,941
Budget 2022	\$ 20,811,168	5.6%	\$ 1,097,206	\$21,225,111	3.00%	\$ 618,207	\$ 413,942
Budget 2023	\$ 20,725,005	-0.4%	\$ (86,163)	\$21,861,864	3.00%	\$ 636,753	\$ 1,136,858

5 Year Rate Requirement Timeline



Sewer Rate Option A – Customer Charge Increase

Option A

Two Year Rate Plan:

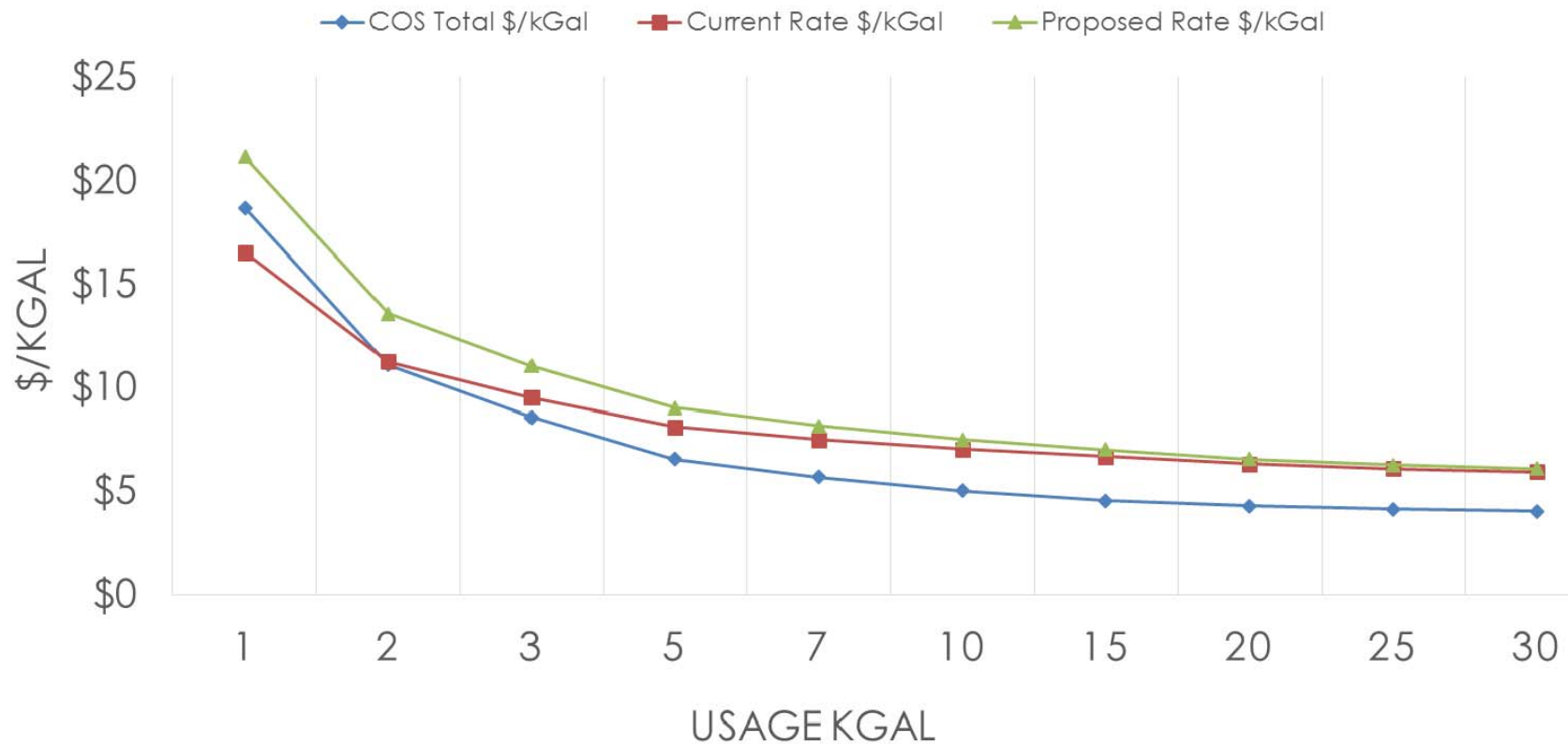
- Increase the monthly Customer Charge by \$2.32 each of the next two years for each rate class.

Option A would generate approximately \$1,327,000 in additional revenue over the two year period.

Sewer – Option A Residential Inside

	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge (1,000 Gal)	\$ 15.18	\$ 16.55	\$ 21.19	\$ 4.64
Next 14,000 Gallons	\$ 3.51	\$ 5.99	\$ 5.99	\$ -
All Additional		\$ 5.20	\$ 5.20	\$ -

RESIDENTIAL INSIDE COST CURVE



Sewer – Option A Residential Inside

Usage						Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal
COS Rates	Current Rates	Proposed Rates							
1 \$ 18.69	\$ 16.55	\$ 21.19	\$ 4.64	\$ 0.15	\$ 16.55	\$ 21.19			
2 \$ 22.20	\$ 22.54	\$ 27.18	\$ 4.64	\$ 0.15	\$ 11.27	\$ 13.59			
3 \$ 25.71	\$ 28.53	\$ 33.17	\$ 4.64	\$ 0.15	\$ 9.51	\$ 11.06			
5 \$ 32.74	\$ 40.51	\$ 45.15	\$ 4.64	\$ 0.15	\$ 8.10	\$ 9.03			
7 \$ 39.76	\$ 52.49	\$ 57.13	\$ 4.64	\$ 0.15	\$ 7.50	\$ 8.16			
10 \$ 50.29	\$ 70.46	\$ 75.10	\$ 4.64	\$ 0.15	\$ 7.05	\$ 7.51			
15 \$ 67.85	\$ 100.41	\$ 105.05	\$ 4.64	\$ 0.15	\$ 6.69	\$ 7.00			
20 \$ 85.40	\$ 126.41	\$ 131.05	\$ 4.64	\$ 0.15	\$ 6.32	\$ 6.55			
25 \$ 102.95	\$ 152.41	\$ 157.05	\$ 4.64	\$ 0.15	\$ 6.10	\$ 6.28			
30 \$ 120.51	\$ 178.41	\$ 183.05	\$ 4.64	\$ 0.15	\$ 5.95	\$ 6.10			
Average Usage						6,352			

Sewer Rate Option B – Customer Charge and Consumption Charge Increase

Option B

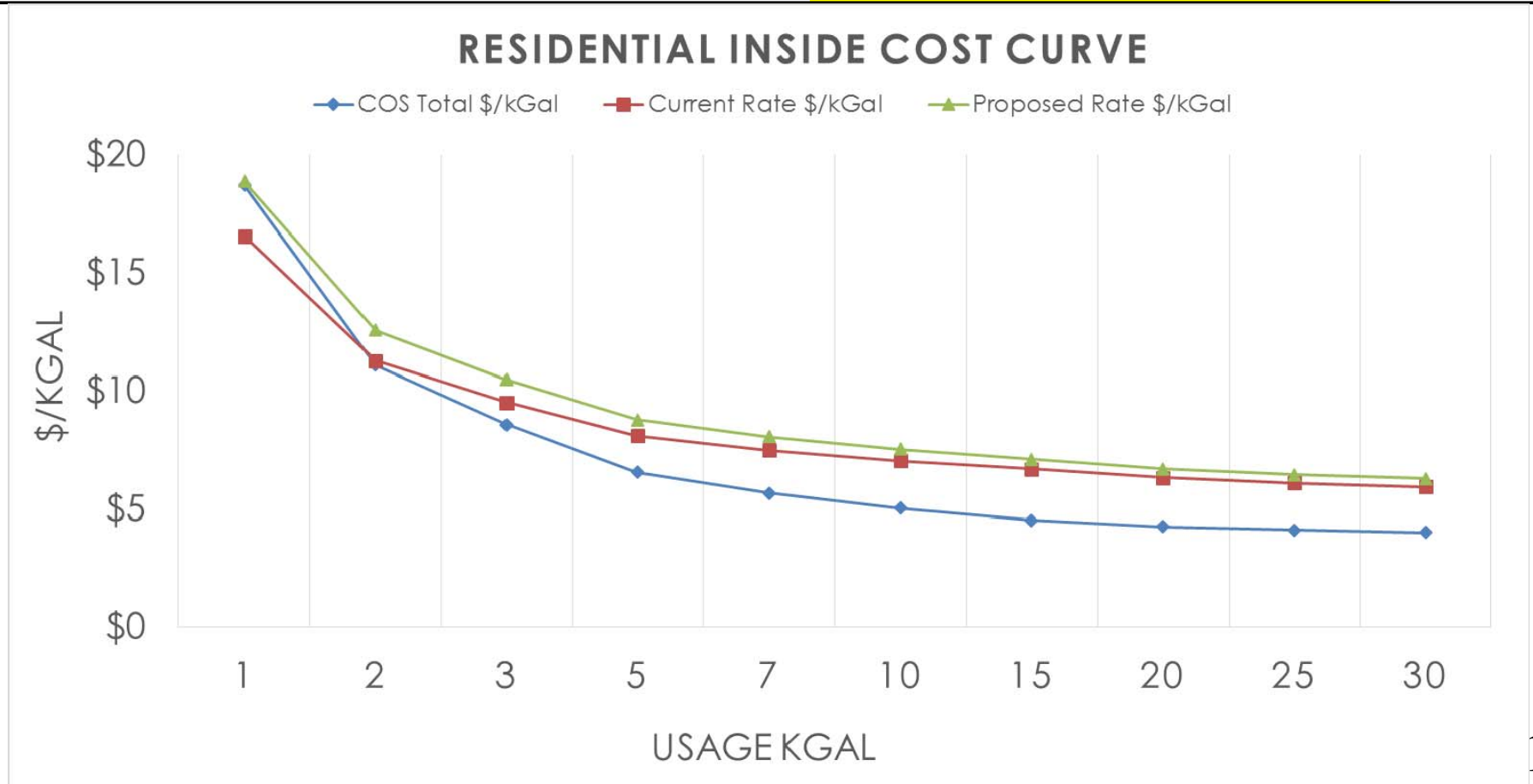
Two Year Rate Plan:

- Increase the monthly Customer Charge by \$1.16 each of the next two years for each rate class.
- Increase the Volumetric Charge by \$0.14 each of the next two years for each rate class.

Option B would generate approximately \$1,300,000 in additional revenue over the two year period.

Sewer – Option B Residential Inside

	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge (1,000 Gal)	\$ 15.18	\$ 16.55	\$ 18.87	\$ 2.32
Next 14,000 Gallons	\$ 3.51	\$ 5.99	\$ 6.27	\$ 0.28
All Additional		\$ 5.20	\$ 5.48	\$ 0.28



Sewer – Option B Residential Inside

Usage		COS Rates	Current Rates	Proposed Rates	Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal
1	\$	18.69	\$ 16.55	\$ 18.87	\$ 2.32	\$ 0.08	\$ 16.55	\$ 18.87
2	\$	22.20	\$ 22.54	\$ 25.14	\$ 2.60	\$ 0.09	\$ 11.27	\$ 12.57
3	\$	25.71	\$ 28.53	\$ 31.41	\$ 2.88	\$ 0.10	\$ 9.51	\$ 10.47
5	\$	32.74	\$ 40.51	\$ 43.95	\$ 3.44	\$ 0.11	\$ 8.10	\$ 8.79
7	\$	39.76	\$ 52.49	\$ 56.49	\$ 4.00	\$ 0.13	\$ 7.50	\$ 8.07
10	\$	50.29	\$ 70.46	\$ 75.30	\$ 4.84	\$ 0.16	\$ 7.05	\$ 7.53
15	\$	67.85	\$ 100.41	\$ 106.65	\$ 6.24	\$ 0.21	\$ 6.69	\$ 7.11
20	\$	85.40	\$ 126.41	\$ 134.05	\$ 7.64	\$ 0.25	\$ 6.32	\$ 6.70
25	\$	102.95	\$ 152.41	\$ 161.45	\$ 9.04	\$ 0.30	\$ 6.10	\$ 6.46
30	\$	120.51	\$ 178.41	\$ 188.85	\$ 10.44	\$ 0.35	\$ 5.95	\$ 6.30
Average Usage		6,352						

Sewer – Summary of Rate Options

Option A			
	Customer Charge Increase	Revenue Generated	Total Revenue Generated
Year 1	\$ 2.32	\$ 663,441	\$ 663,441
Year 2	\$ 2.32	\$ 663,441	\$ 663,441
		<u>\$1,326,882</u>	<u>\$1,326,882</u>

Option B					
	Customer Charge Increase	Revenue Generated	Volumetric Charge Increase	Revenue Generated	Total Revenue Generated
Year 1	\$ 1.16	\$ 331,721	\$ 0.14	\$ 318,123	\$ 649,844
Year 2	\$ 1.16	\$ 331,721	\$ 0.14	\$ 318,123	\$ 649,844
		<u>\$ 663,441</u>		<u>\$ 636,246</u>	<u>\$1,299,687</u>