



Financial Forecast and Rate Alternatives

Presentation to the Commissioners
August 11, 2011

Presented by:

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Rocky Craley

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RAFTELIS FINANCIAL
CONSULTANTS, INC.



Agenda

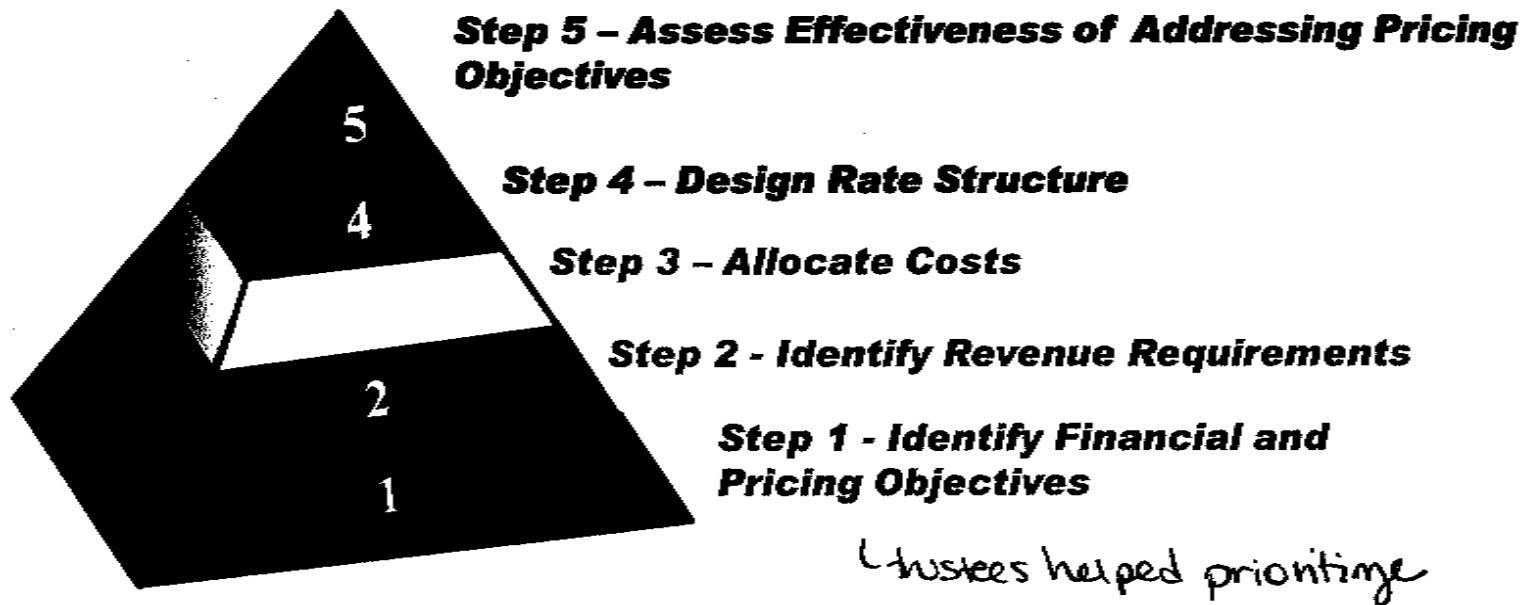
- Scope of Rate Study
- Financial Forecast
- Rate Structure Development
- Rate Structure Alternatives
- Customer Impacts
- Benchmarking
- Summary Comparison

Scope of rate study

- ✓ Develop a rate model to identify the revenues requirements over the next several years
- ✓ Identify alternative rate structures that meet revenue requirements and pricing objectives
- ✓ Identify the most viable alternative rate structure

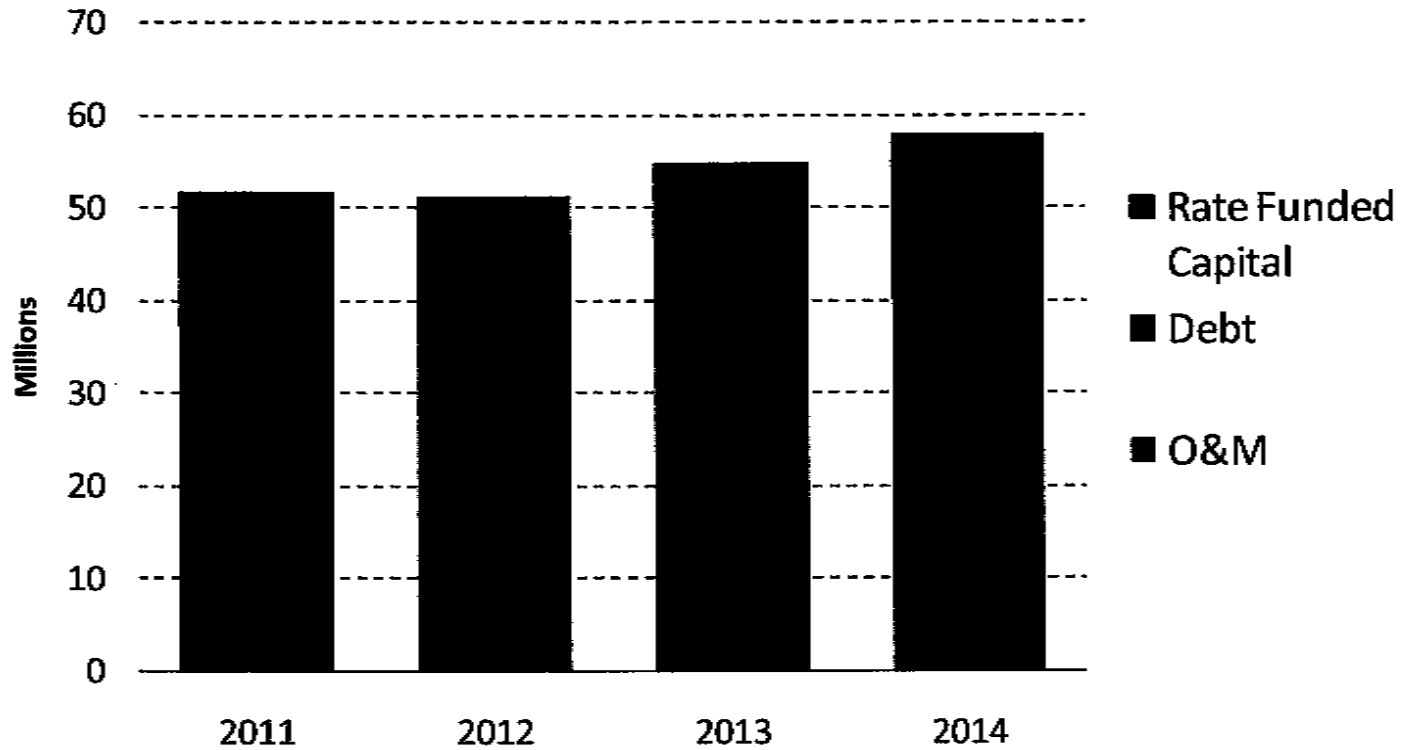


Status of Rate Design Process



Financial Forecast

Forecast of Revenue Requirements

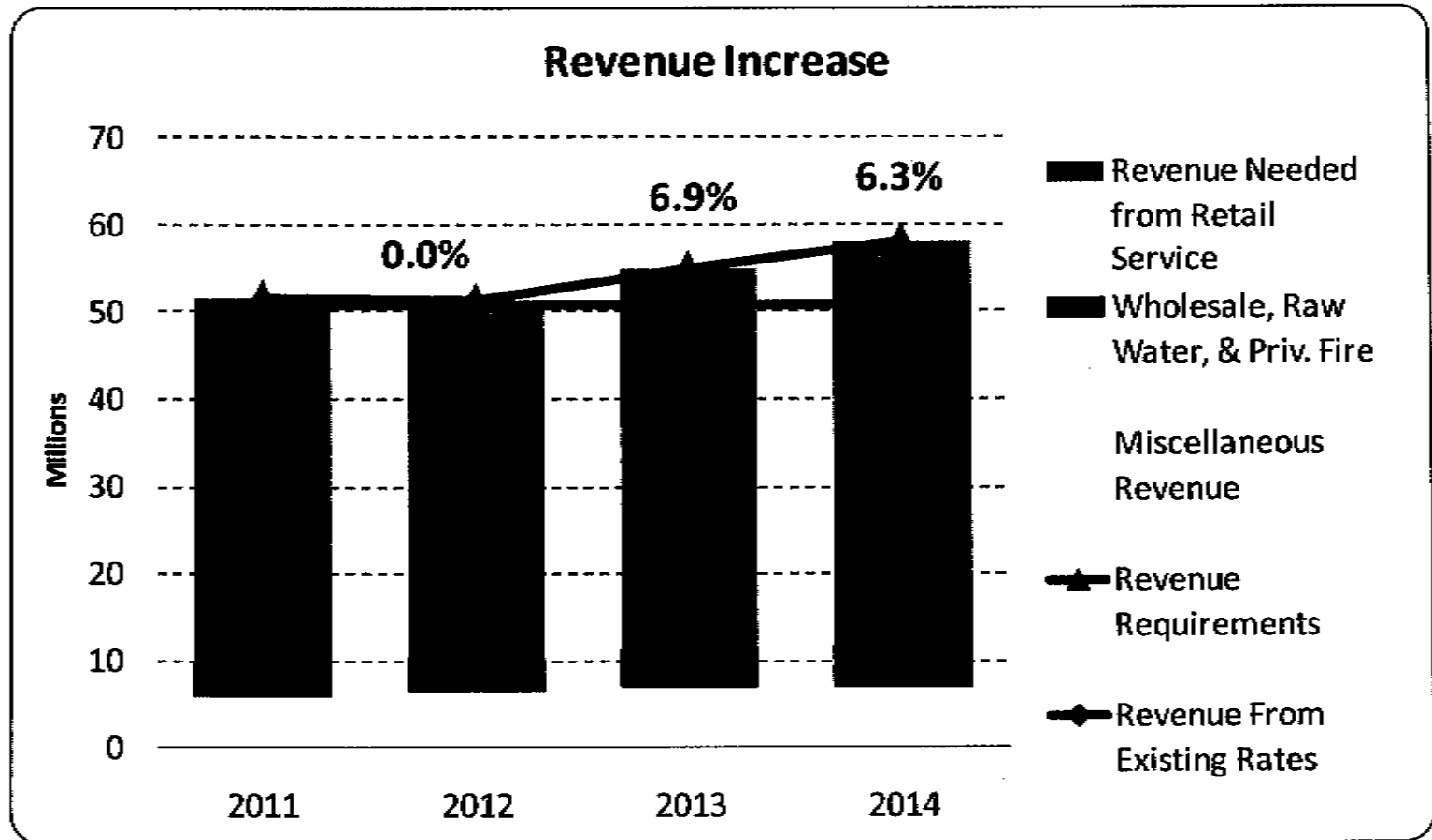




Cost Drivers

- *O&M*
 - Projected 0.0% in 2012, 4.2% increase in 2013 and 3.0% increases in 2014.
- *Debt and Rate Funded Capital*
 - 2012 Bond Issue of approximately \$22.4 million.
 - 2014 Bond Issue of approximately \$11.2 million.
 - Total CIP of Approximately \$95.7 million.
- *Debt Service Coverage Requirement*
 - Target debt service coverage ratio of 2.0

Revenue Forecast



Note: The revenue increases reflect the use of the rate stabilization fund to mitigate rate increases. 6.3% rate increases annually have been the trend in recent years according to the RFC/AWWA 2010 Water and Wastewater Rate Survey



Data Used for Development of Rate Structure Alternatives

Comprehensive Cost of Service and Rate Design Study

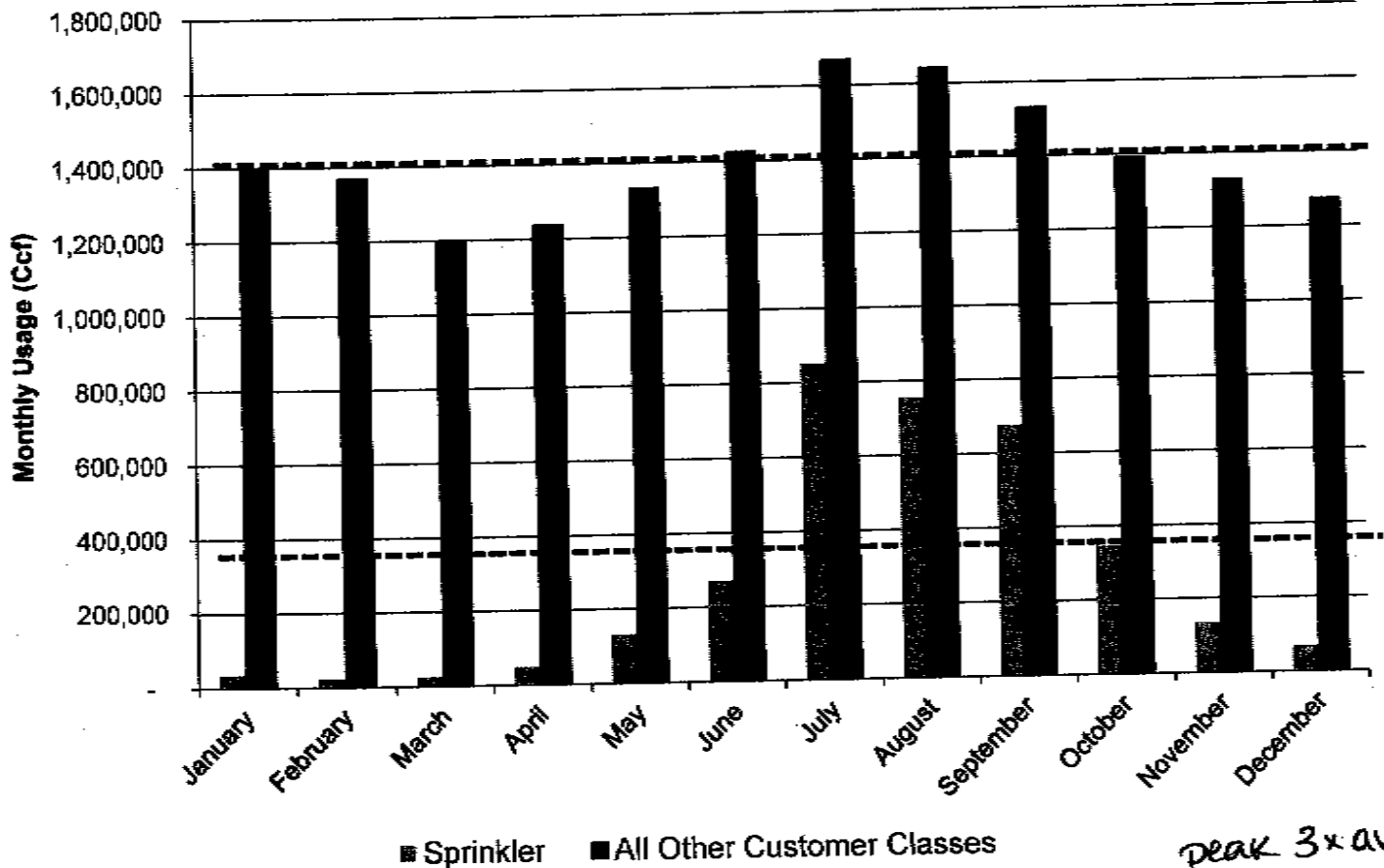
Results From Pricing Objectives Exercise

Classification	Rank	Objective	Score
Essential	1	Financial Sufficiency	28
	2	Legality	26
	3	Revenue Stability	22
Very Important	4	Conservation/Demand Management	21
	5	Cost of Service Based Allocations	20
	5	Rate Stability	20
Important	7	Affordability to Disadvantaged Customers	16
	7	Simple to Understand and Update	16
	9	Minimization of Customer Impacts	14
Least Important	10	Ease of Implementation	13
	10	Economic Development	13
	12	Equitable Contributions from New Customers	12



Peaking Factors

Sprinkler customers have a peaking factor of 3.0, as opposed to 1.2 for all other customer classes



Comprehensive Cost of Service and Rate Design Study

peak 3x avg for sprinkler use

Essential Water Use

Domestic Use – Essential Indoor Water Use

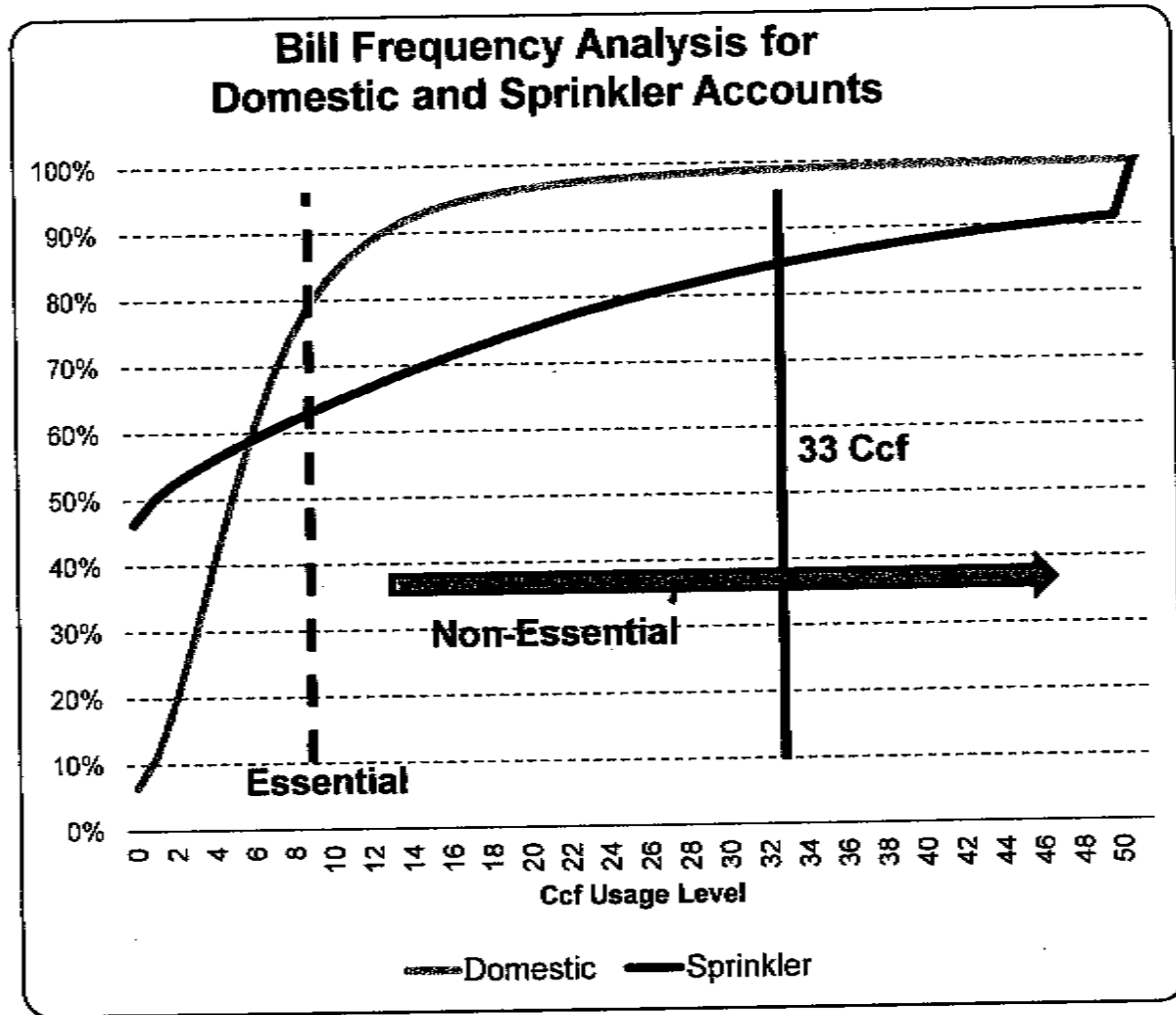
AWWA -average per capita use is 70 gallons per person per day.
2010 census - average Little Rock household has 3 people.

Essential indoor water use is : **8.6 Ccf, per month** ?

6.5 ccf per month



Bill Frequency





Alternative Rate Structures

Comprehensive Cost of Service and Rate Design Study

Alternative 1

Thresholds and Demand Charges
 Domestic and Sprinkler
 Minimum Allowance
 Tier 1
 Tier 2
 Tier 3

Alternative 1		Alternative 2		Alternative 3	
Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge
0 - 2		0 - 2		0 - 2	
3 - 33		3 - 20		3 - 15	
> 33	30%	21 - 50	30%	16 - 33	20%
		> 50	50%	> 33	40%
			(20)		(20)

- Leave rate structure unchanged
- Increase rates to recover 6.9% more in revenues
- To promote affordability, the monthly charge will be increased less than the volumetric charges



Alternative 2

Thresholds and Demand Charges
 Domestic and Sprinkler
 Minimum Allowance
 Tier 1
 Tier 2
 Tier 3

Alternative 1		Alternative 2		Alternative 3	
Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge
0 - 2		0 - 2		0 - 2	
3 - 33		3 - 20		3 - 15	
> 33	30%	21 - 50	30%	16 - 33	20%
		> 50	50%	> 33	40%

- Modify rate structure to promote conservation/demand management and further enhancing affordability.
- Revenues increase by 6.9%
- Rate structure changes - add tier from 20 to 50 Ccf with 30% demand charge, and then assess a 50% demand charge to use 50 Ccf or greater.



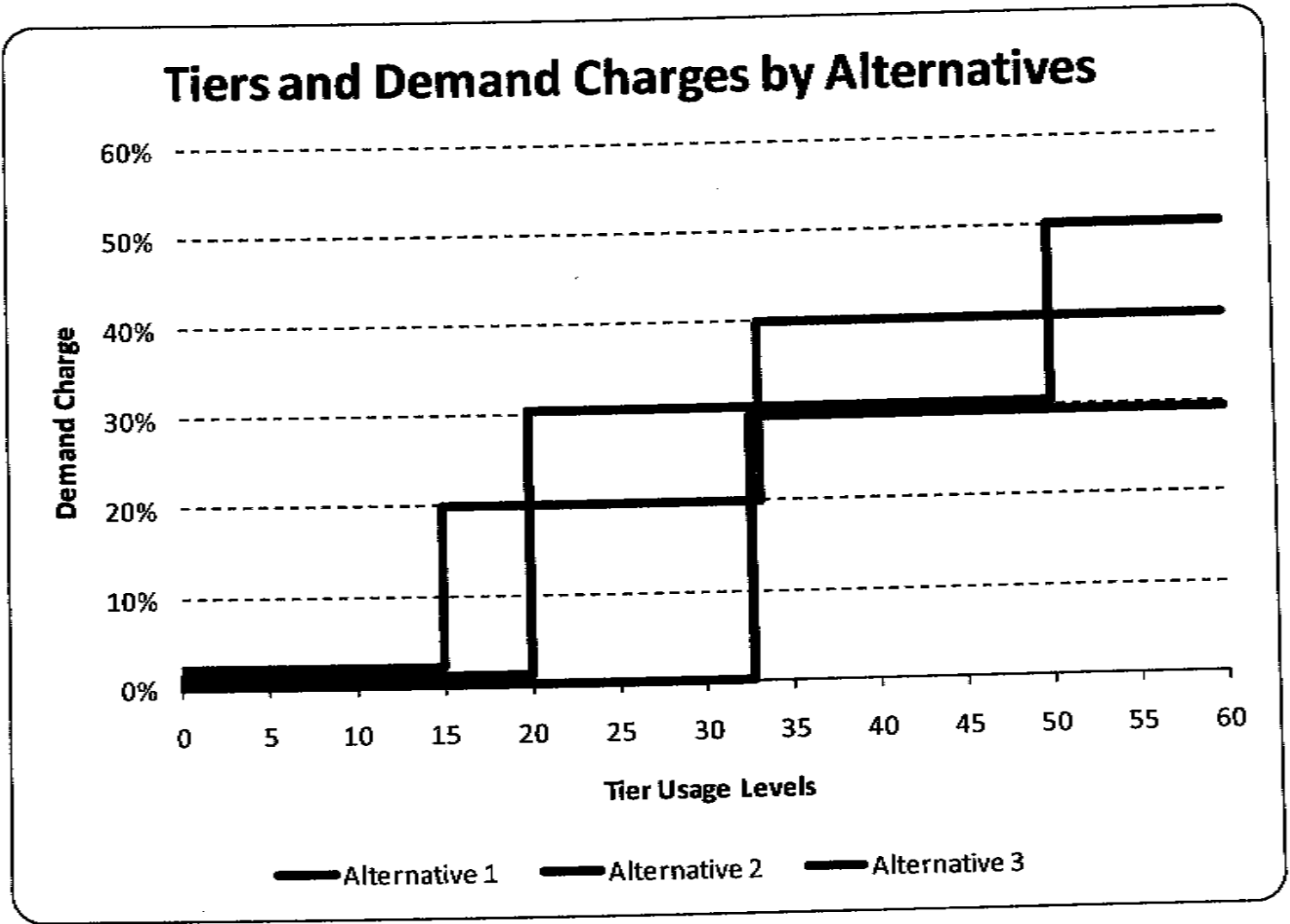
Alternative 3

Thresholds and Demand Charges
 Domestic and Sprinkler
 Minimum Allowance
 Tier 1
 Tier 2
 Tier 3

Alternative 1		Alternative 2		Alternative 3	
Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge	Tiered Structure (Ccf)	Volumetric Demand Charge
0 - 2		0 - 2		0 - 2	
3 - 33		3 - 20		3 - 15	
> 33	30%	21 - 50	30%	16 - 33	20%
		> 50	50%	> 33	40%

- Modify rate structure to promote conservation/demand management and further enhancing affordability.
- Revenues increase by 6.9%.
- Rate structure changes – add tier from 16 to 33 ccf with a 20% demand charge, and then assess a 40% demand charge to those using 33 ccf or more.

Summary of Alternatives

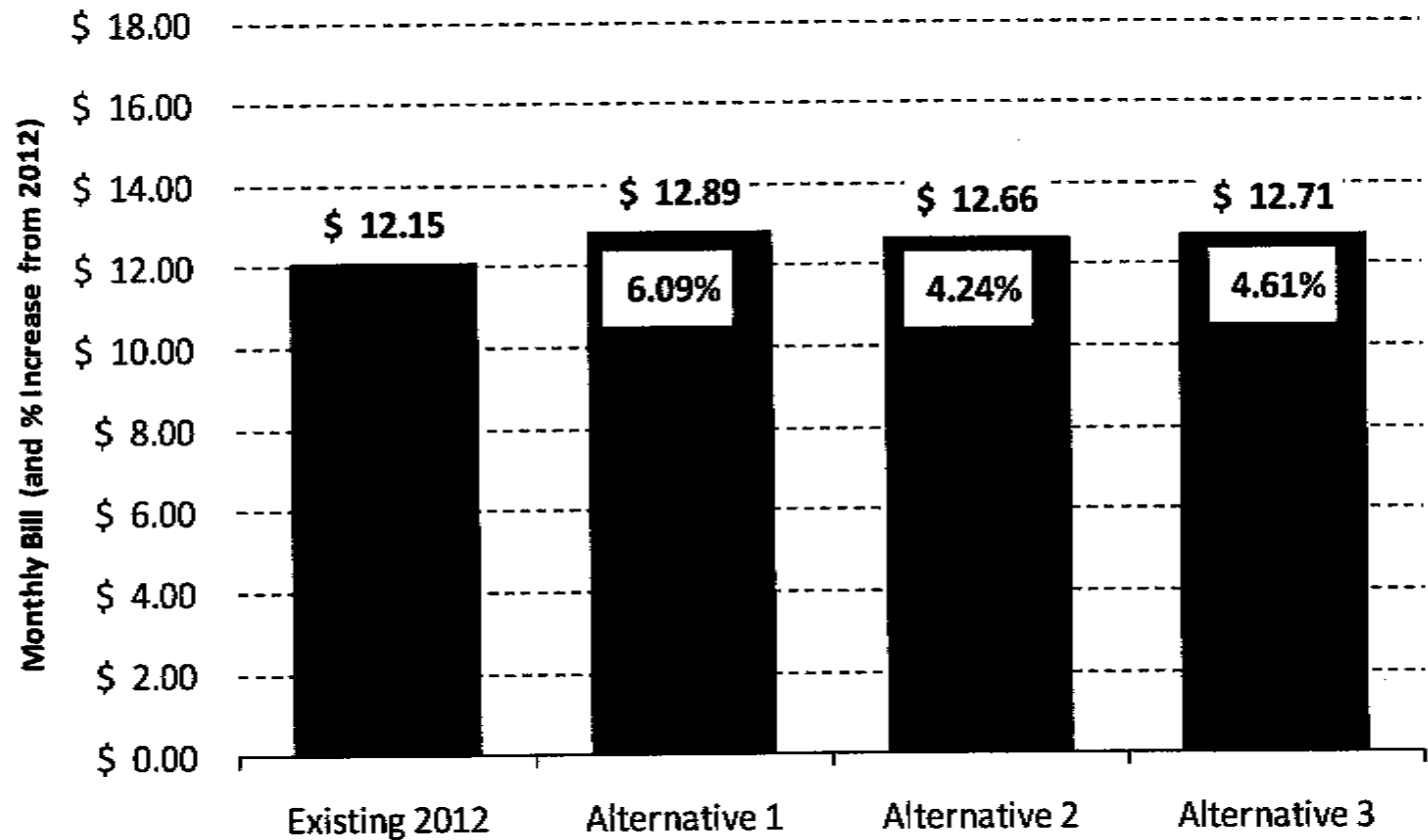




Customer Impacts Under Alternatives



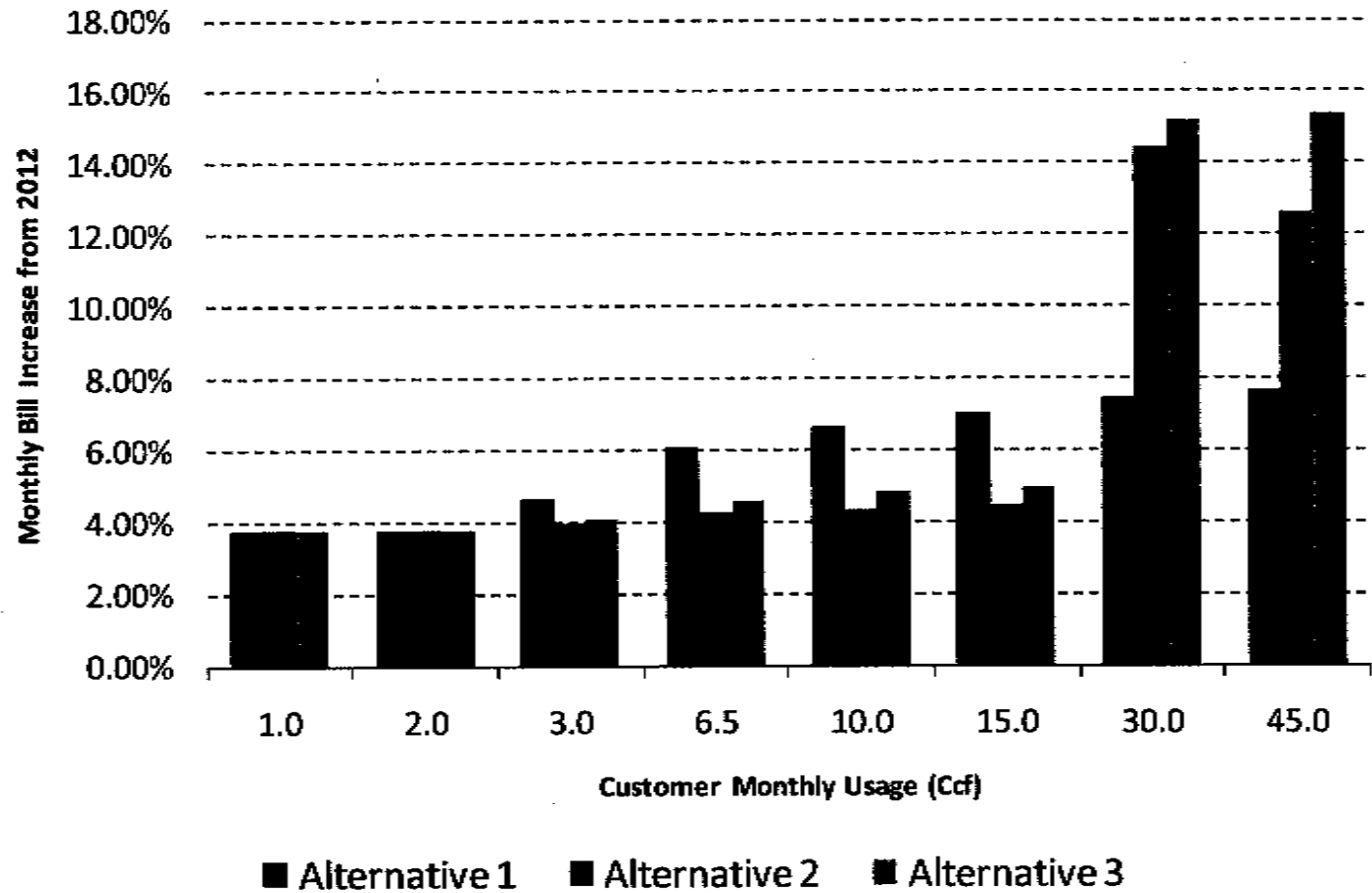
Inside City Domestic Customer Impact Analysis: Average Customer at 6.5 Ccf Per Month



Observation: Average Domestic customer using 6.5 Ccf is impacted the most under Alternative 1.



Inside City Domestic Customer Impact Analysis: Percent Change from 2012



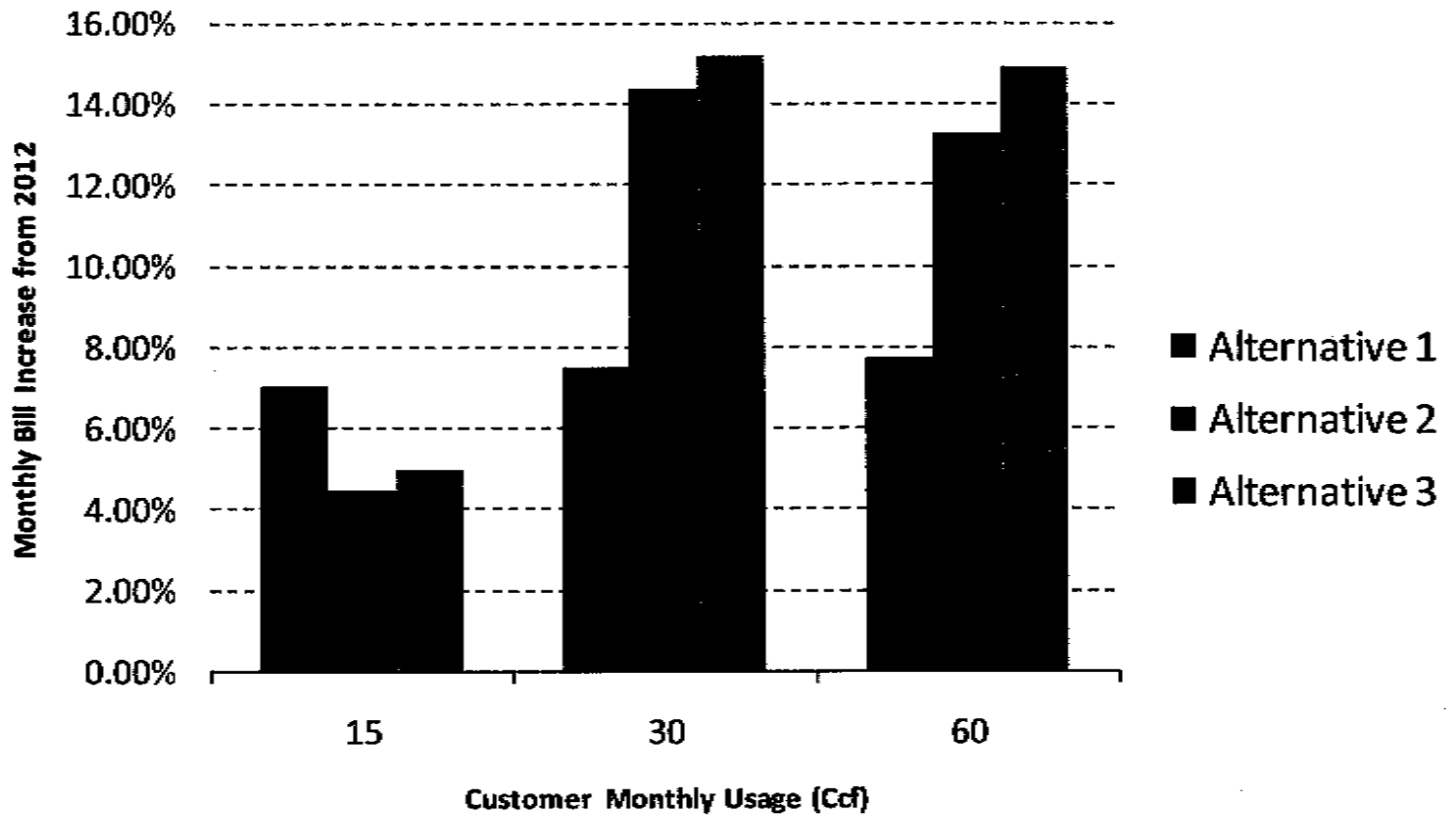
Observation: Low use Domestic customers, less than 3 Ccf, are impacted the same under all 3 Alternatives, whereas high use Domestic customers are impacted more under Alternatives 2 and 3.

City of Denver Customer Impact Analysis - Do the Change from DP

Monthly Usage (Ccf)	Alternative 1	Alternative 2	Alternative 3
1.0	\$ 0.17	\$ 0.17	\$ 0.17
2.0	0.17	0.17	0.17
3.0	0.27	0.23	0.24
6.5	0.74 <i>monthly</i>	0.52	0.56
10.0	1.16	0.76	0.84
15.0	1.76	1.11	1.24
30.0	3.56	6.86	7.24
45.0	5.80	9.52	11.64

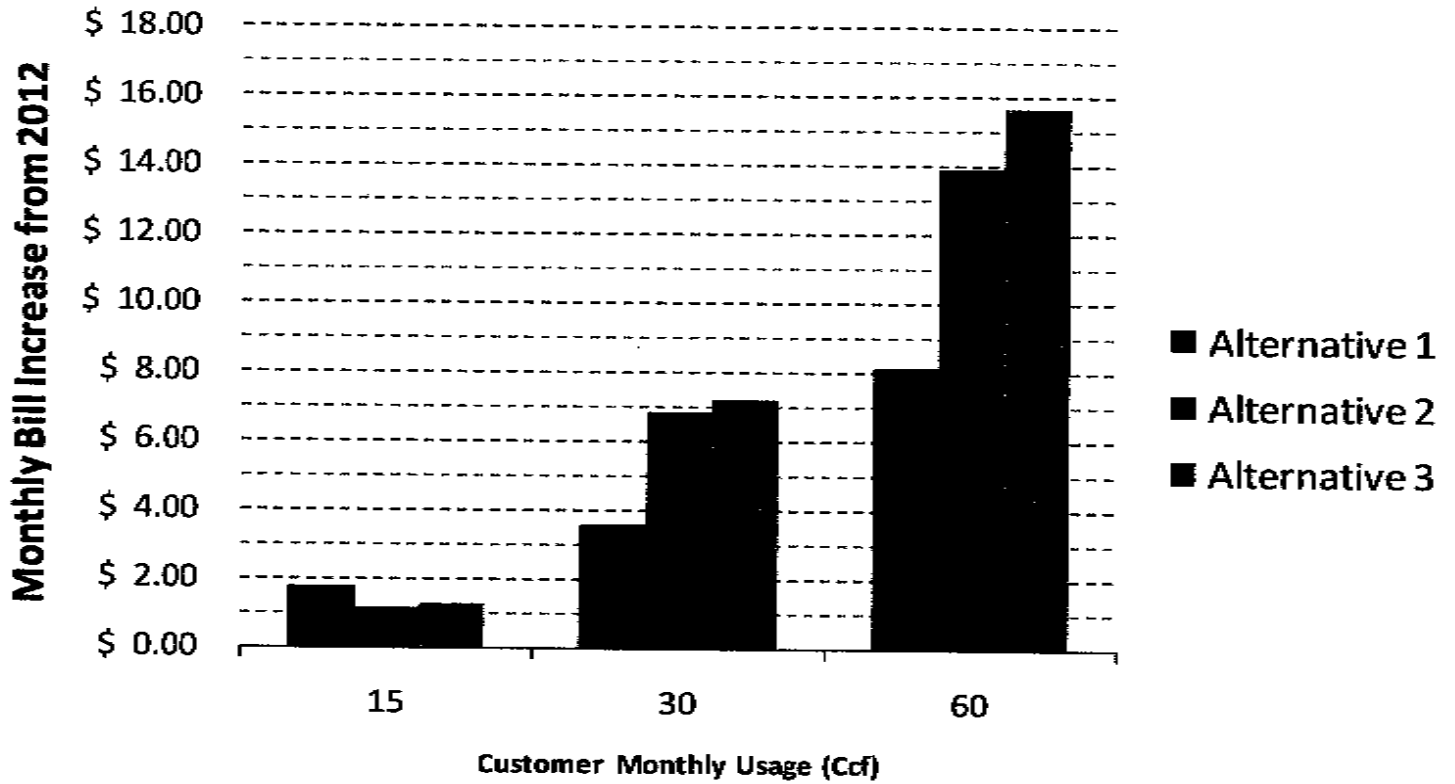
Observation: Low use Domestic customers, less than 3 Ccf, are impacted the same under all 3 Alternatives, whereas high use Domestic customers are impacted more under Alternatives 2 and 3.

Inside City Sprinkler Customer Impact Analysis: Percent Change from 2012



Observation: High use Sprinkler customers (greater than 15 Ccf) are impacted the most under Alternatives 2 and 3.

Inside City Sprinkler Customer Impact Analysis: Dollar Change from 2012

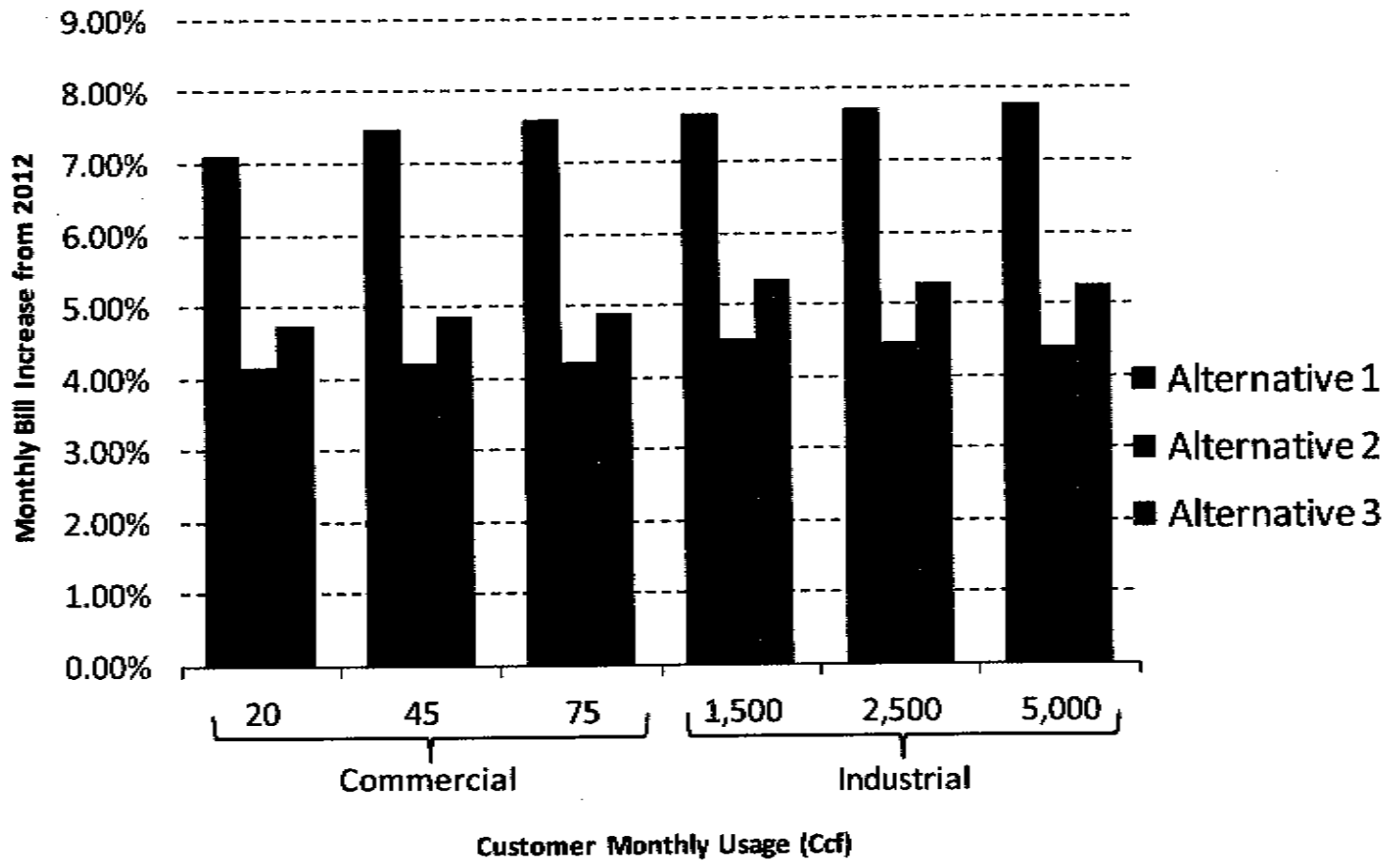


Monthly Bill Increase from 2012 by Customer Monthly Usage (Ccf) from 2012

Monthly Usage (Ccf)	Alternative 1	Alternative 2	Alternative 3
15.0	\$ 1.76	\$ 1.11	\$ 1.24
30.0	3.56 <i>per month</i>	6.86	7.24
60.0	8.16	13.93	15.65



Inside City Commercial and Industrial Customer Impact Analysis: Percent Change from 2012

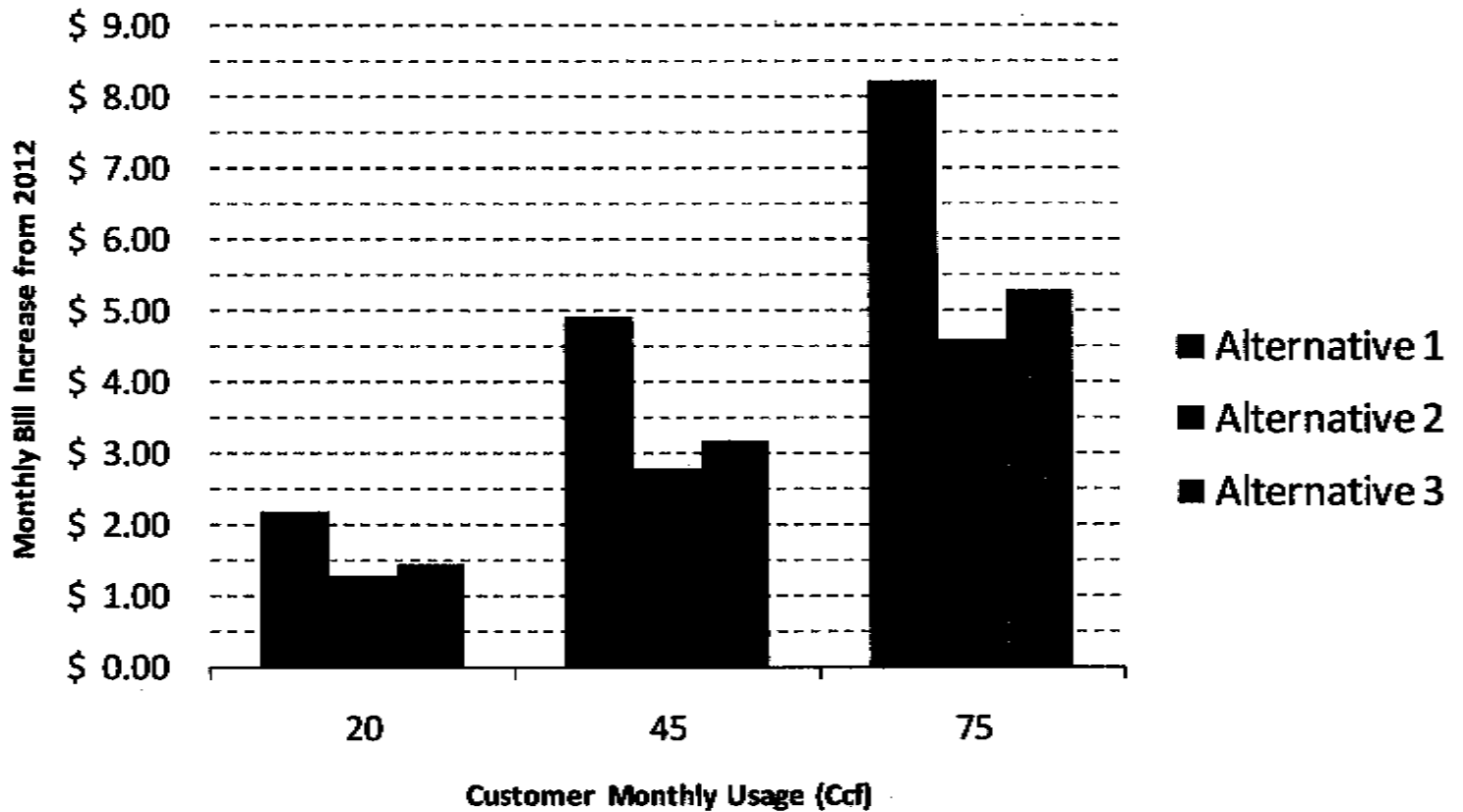


Observation: Commercial and Industrial customers are most impacted under Alternative 1.

more from uniform prices



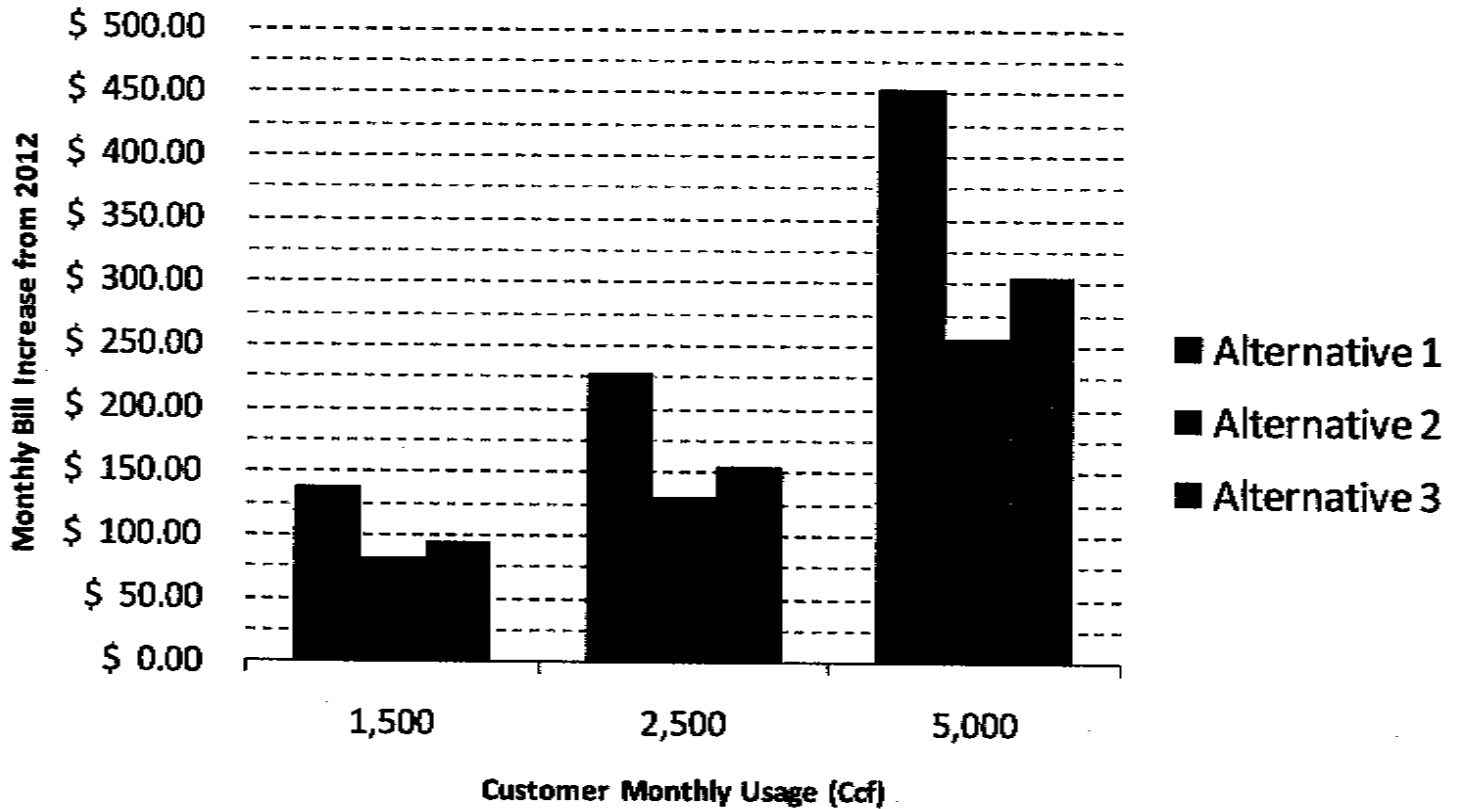
Inside City Commercial Customer Impact Analysis: Dollar Change from 2012



Observation: Commercial and Industrial customers are most impacted under Alternative 1.



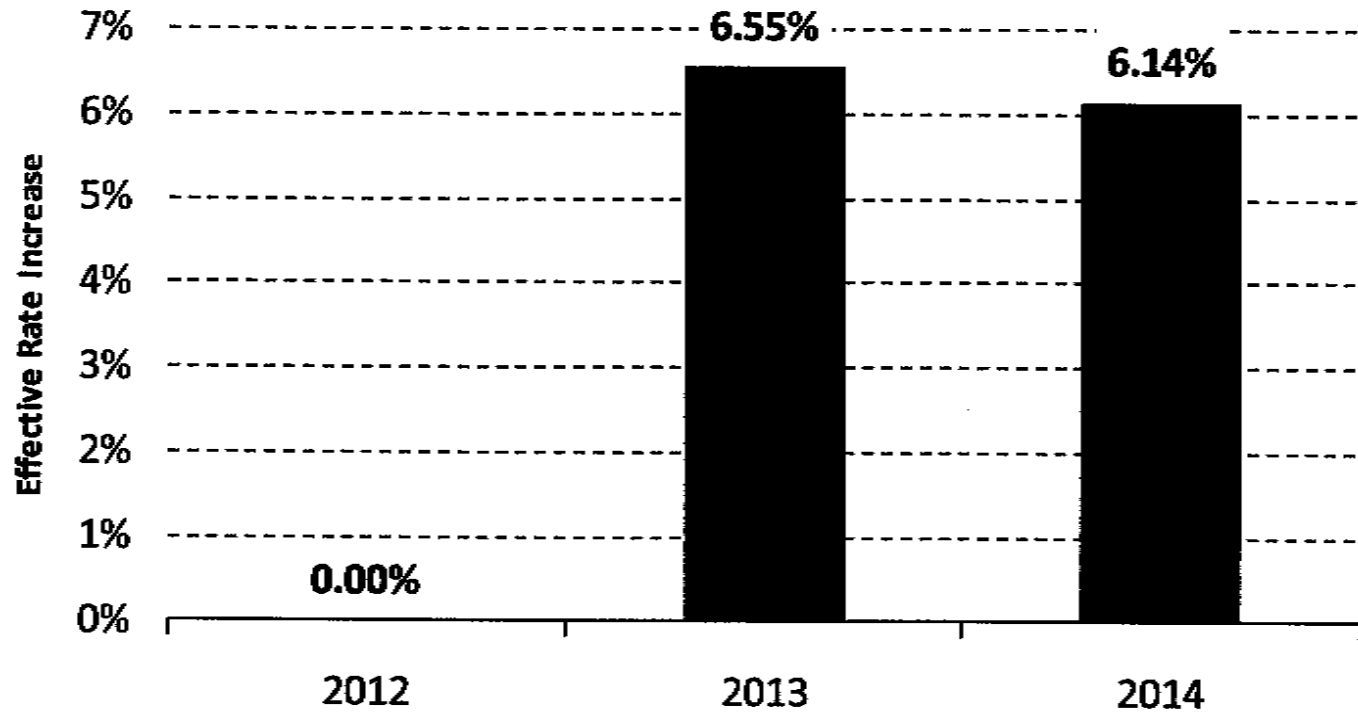
Inside City Industrial Customer Impact Analysis: Dollar Change from 2012



Observation: Commercial and Industrial customers are most impacted under Alternative 1.



Wholesale Customer Impact Analysis: Overall Effective Rate Increase



Observation: The annual rate increase for wholesale customers tracks and is similar to the overall retail rate increases.

Number of Customers Impacted by Changes in the Alternatives

Tiers	Tier Thresholds	Demand Charge	% of Domestic Customers	% of Sprinkler Customers	% of Total Customers	Demand Charge Impact
ALTERNATIVE 1						
Minimum	0 - 2	-	19.4%	52.3%	22.8%	Consistent with Existing
Tier 1	3 - 33	0%	79.5%	32.3%	65.8%	Consistent with Existing
Tier 2	> 33	30%	1.1%	15.4%	11.4%	Consistent with Existing
Total % of Customers Impacted by Demand Charge Increase					0%	
ALTERNATIVE 2						
Minimum	0 - 2	-	19.4%	52.3%	22.8%	Consistent with Existing
Tier 1	3 - 20	0%	77.0%	22.8%	62.5%	Consistent with Existing
Tier 2	21 - 50	30%	2.5%	9.5%	3.3%	Demand Charge Increase
	→ 21-33 → 34-50	30%	0.7%	6.6%	1.5%	Consistent with Existing
Tier 3	> 50	50%	0.4%	8.8%	9.8%	Demand Charge Increase
Total % of Customers Impacted by Demand Charge Increase					13.2%	<i>more impacted</i>
ALTERNATIVE 3						
Minimum	0 - 2	-	19.4%	52.3%	22.8%	Consistent with Existing
Tier 1	3 - 15	0%	73.7%	17.7%	59.1%	Consistent with Existing
Tier 2	16 - 33	20%	5.8%	14.6%	6.7%	Demand Charge Increase
Tier 3	> 33	40%	1.1%	15.4%	11.4%	Demand Charge Increase
Total % of Customers Impacted by Demand Charge Increase					18.0%	<i>more impacted</i> <i>all 3 highest</i>

Comparison of Inside City Rates Under Alternatives

Inside City Customer 2013 Rates

Monthly Charge

	Existing Rates	Alternative 1	Alternative 2	Alternative 3
5/8"	\$ 5.35	\$ 5.55	\$ 5.55	\$ 5.55
3/4"	6.90	7.16	7.25	7.25
1"	9.81	10.18	10.67	10.67
1 1/2"	16.59	17.22	19.20	19.20
2"	26.90	27.92	29.43	29.43
3"	49.75	51.64	53.32	53.32
4"	80.92	83.99	87.44	87.44
6"	160.05	166.13	172.74	172.74
8"	270.71	281.00	275.10	275.10
10"	389.75	404.56	394.52	394.52
12"	709.83	736.80	735.71	735.71

Volumetric Rates

Domestic

Tier 1	3 - 33	\$ 1.51	3 - 33	\$ 1.63	3 - 20	\$ 1.58	3 - 15	\$ 1.59
Tier 2	> 33	\$ 1.96	> 33	\$ 2.12	21 - 50	\$ 2.05	16 - 33	\$ 1.91
Tier 3					> 50	\$ 2.36	> 33	\$ 2.23

Commercial

Uniform	All Use	\$ 1.41	All Use	\$ 1.52	All Use	\$ 1.47	All Use	\$ 1.48
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Industrial

Uniform	All Use	\$ 1.15	All Use	\$ 1.24	All Use	\$ 1.20	All Use	\$ 1.21
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Sprinkler

Tier 1	3 - 33	\$ 1.51	3 - 33	\$ 1.63	3 - 20	\$ 1.58	3 - 15	\$ 1.59
Tier 2	> 33	\$ 1.96	> 33	\$ 2.12	21 - 50	\$ 2.05	16 - 33	\$ 1.91
Tier 3					> 50	\$ 2.36	> 33	\$ 2.23

2014 Rate Increase

		6.25%		6.25%		6.25%
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Revenue Recovery under Alternatives

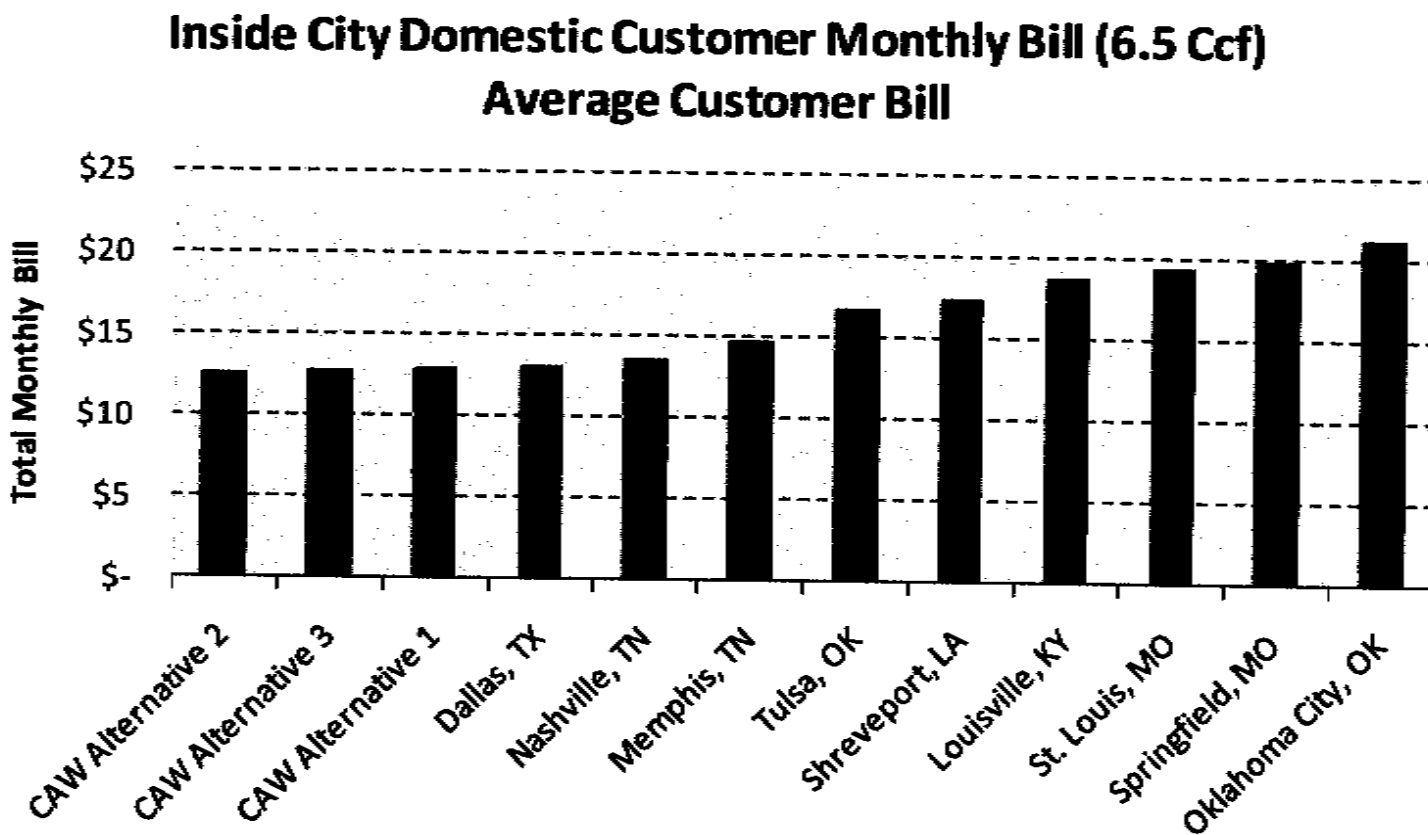
	Alternative 1	Alternative 2		Alternative 3	
	Annual Revenue	Annual Revenue	Change from Alt 1	Annual Revenue	Change from Alt 1
Little Rock					
Domestic	\$ 11,912,381	\$ 11,814,379	-0.82%	\$ 11,890,150	-0.19%
Commercial	7,925,230	7,753,946	-2.16%	7,800,910	-1.57%
Industrial	2,316,314	2,243,299	-3.15%	2,262,292	-2.33%
Sprinkler	8,051,153	8,513,160	5.74%	8,430,401	4.71%
Subtotal	\$ 30,205,077	\$ 30,324,784		\$ 30,383,754	
North Little Rock					
Domestic	\$ 7,949,779	\$ 7,845,969	-1.31%	\$ 7,916,560	-0.42%
Commercial	3,264,166	3,193,093	-2.18%	3,215,285	-1.50%
Industrial	681,011	660,083	-3.07%	665,546	-2.27%
Sprinkler	1,775,345	1,873,089	5.51%	1,863,098	4.94%
Subtotal	\$ 13,670,302	\$ 13,572,234		\$ 13,660,489	

Observation: Sprinkler accounts for Little Rock and North Little Rock recover a greater level of revenue under Alternatives 2 and 3.



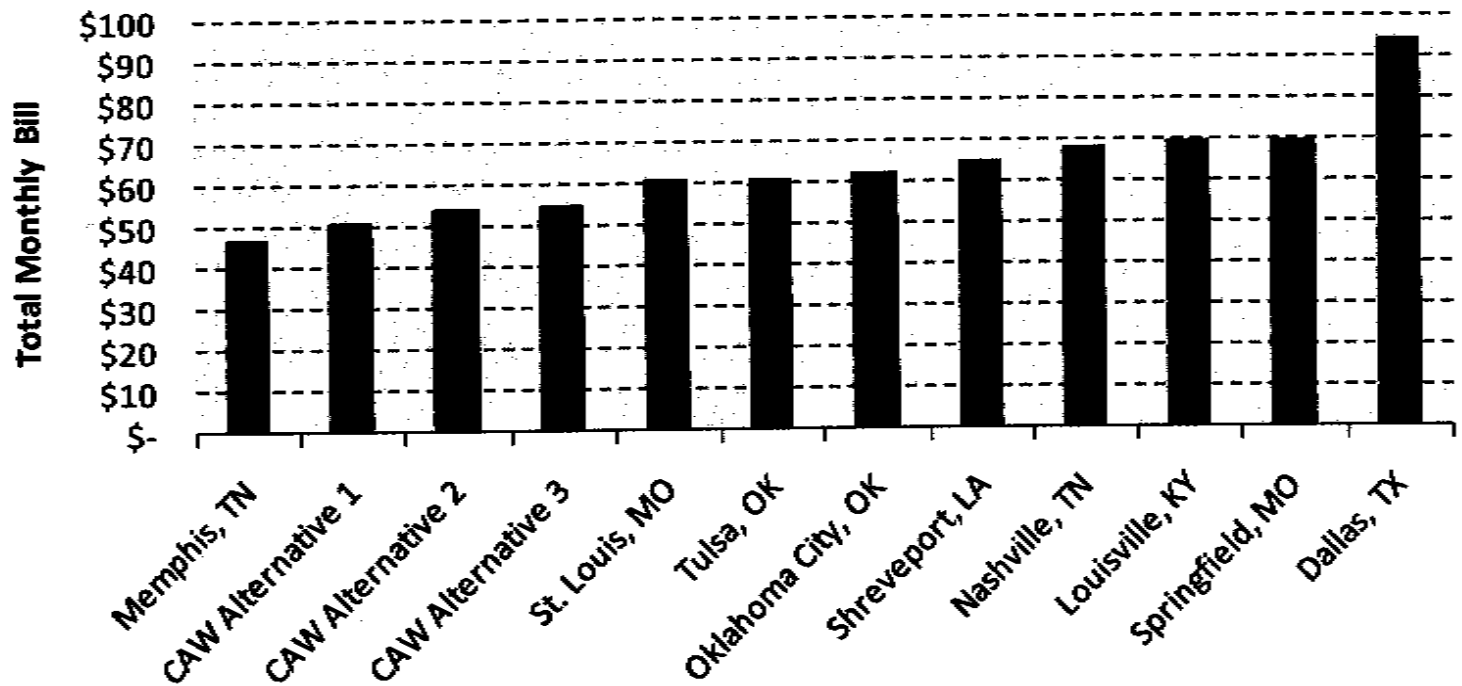
Customer Rate Comparisons with Regional Peer Utilities

Benchmarking with Regional Peer Utilities

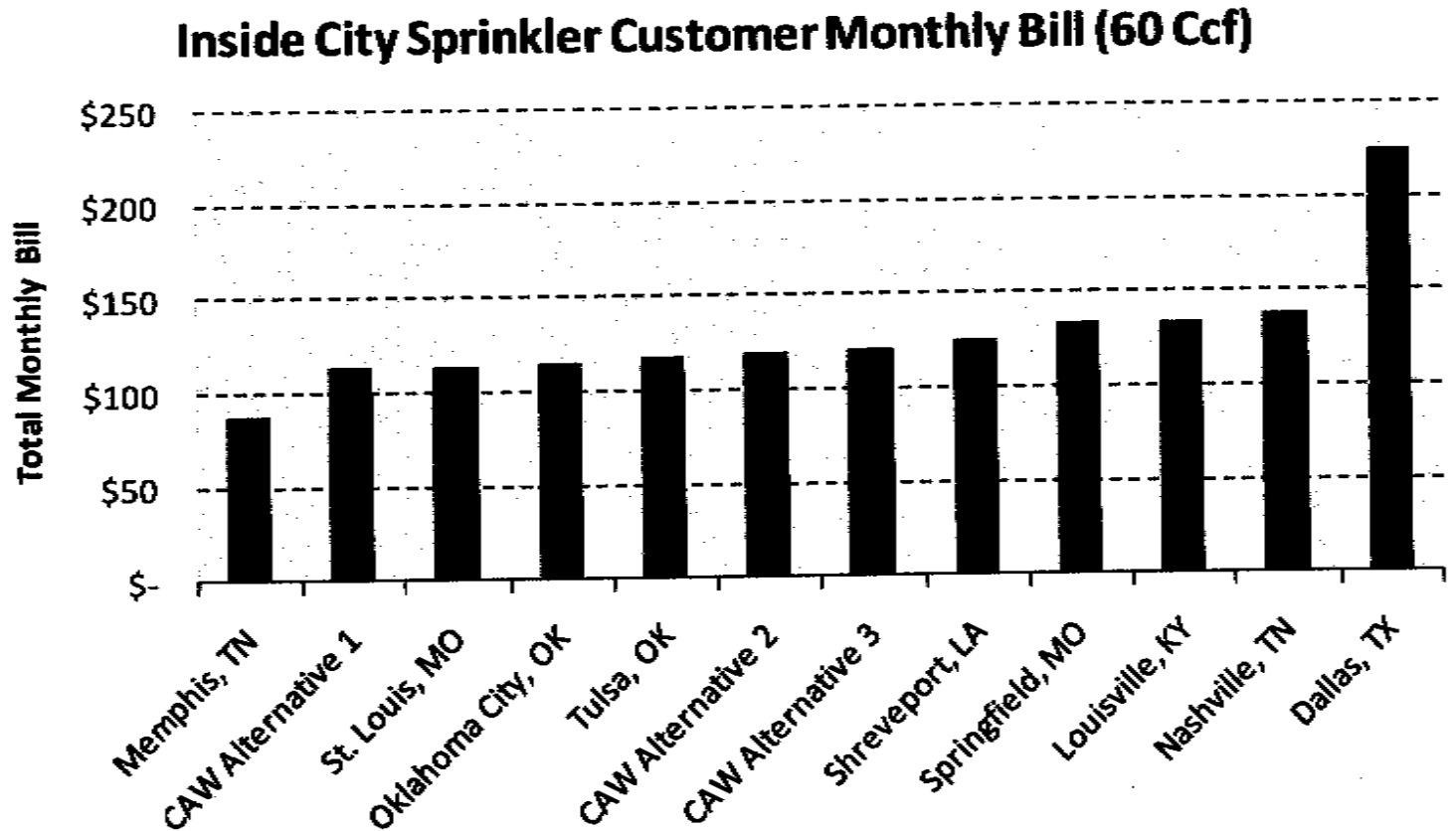


Benchmarking with Regional Peer Utilities

Inside City Sprinkler Customer Monthly Bill (30 Ccf)
Average Customer Bill

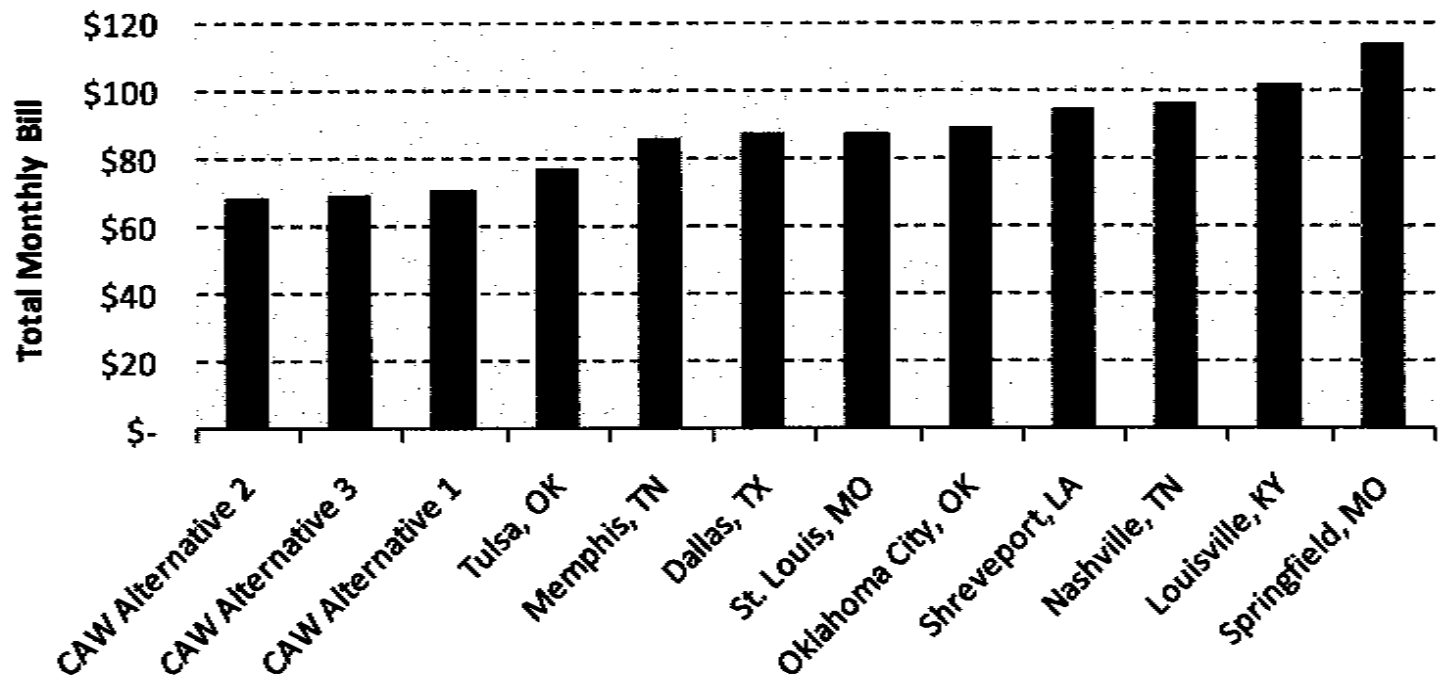


Benchmarking with Regional Peer Utilities



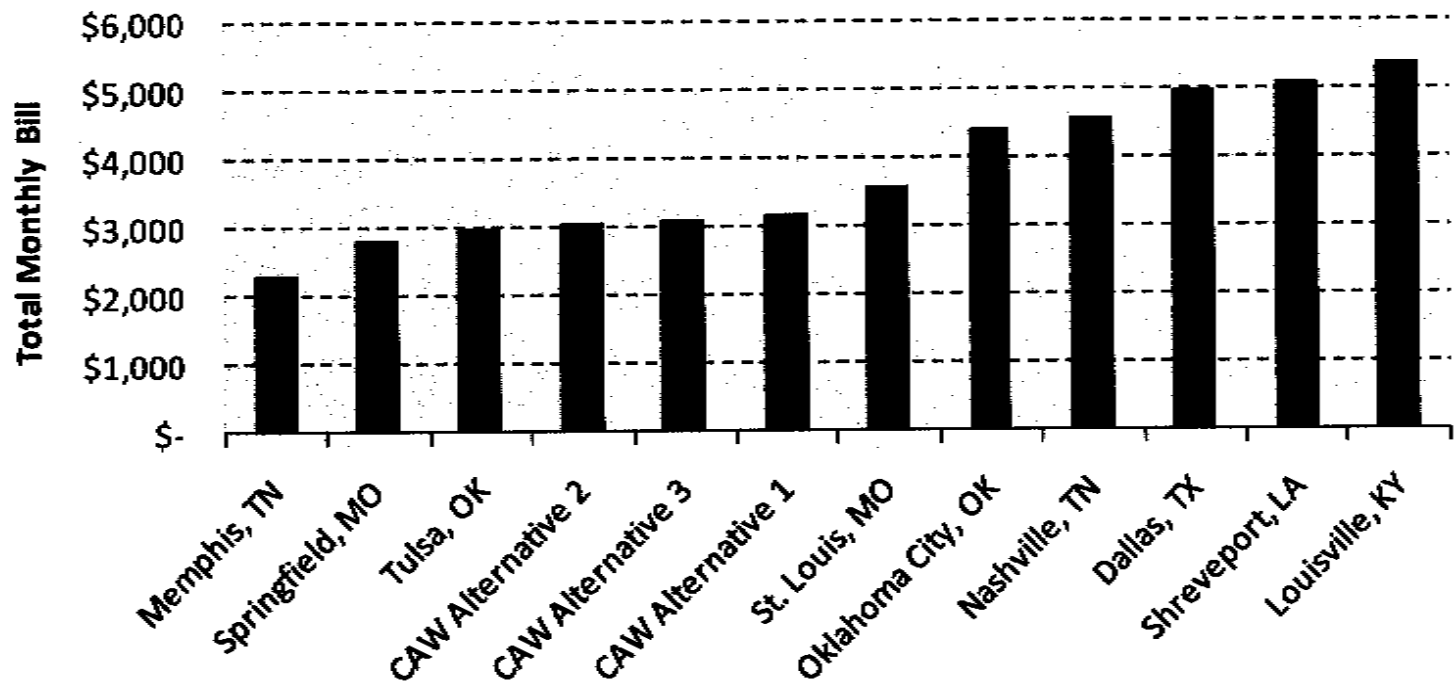
Benchmarking with Regional Peer Utilities

**Inside City Commercial Customer Monthly Bill (45 Ccf)
Average Customer Bill**



Benchmarking with Regional Peer Utilities

**Inside City Industrial Customer Monthly Bill (2,500 Ccf)
Average Customer Bill**






Summary of Alternatives for Consideration

Alternatives Comparison

Usage (Ccf)	Alternative 1			Alternative 2			2012	2013	2014
	2012	2013	2014	2012	2013	2014			
Domestic									
3	0.00%	4.66%	6.27%	0.00%	3.94%	6.31%	0.00%	4.08%	6.30%
6.5 *	0.00%	6.09%	6.21%	0.00%	4.24%	6.32%	0.00%	4.61%	6.30%
15	0.00%	7.05%	6.17%	0.00%	4.44%	6.32%	0.00%	4.96%	6.29%
30	0.00%	7.47%	6.15%	0.00%	14.40%	6.33%	0.00%	15.20%	6.29%
Commercial									
45 *	0.00%	7.47%	6.56%	0.00%	4.21%	6.14%	0.00%	4.87%	6.10%
Industrial									
2,500 *	0.00%	7.72%	6.45%	0.00%	4.45%	6.66%	0.00%	5.30%	6.60%
Sprinkler									
30	0.00%	7.47%	6.15%	0.00%	14.40%	6.33%	0.00%	15.20%	6.29%
60	0.00%	7.76%	6.14%	0.00%	13.25%	6.34%	0.00%	14.88%	6.28%

* Denotes approximate level of usage for the average customer per class.



**Thank you for your
participation
throughout this
process!**



Supplemental Information

Comprehensive Cost of Service and Rate Design Study

Alternative 1 Rate Structure Rate Forecast

	2012	2013	2014
	Existing Rates (no change)	Alternative 1 (no change)	6.25% Increase (across-the-board)
<i>Monthly Charge</i>			
<i>Inside City</i>			
5/8"	\$ 5.35	\$ 5.55	\$ 5.90
3/4"	6.90	7.16	7.61
1"	9.81	10.18	10.82
1 1/2"	16.59	17.22	18.30
2"	26.90	27.92	29.67
3"	49.75	51.64	54.87
4"	80.92	83.99	89.24
6"	160.05	166.13	176.51
8"	270.71	281.00	298.56
10"	389.75	404.56	429.85
12"	709.83	736.80	782.85
<i>Outside City</i>			
5/8"	\$ 7.00	\$ 7.27	\$ 7.72
3/4"	9.03	9.37	9.96
1"	12.84	13.33	14.16
1 1/2"	21.70	22.52	23.93
2"	35.21	36.55	38.83
3"	65.11	67.58	71.80
4"	105.91	109.93	116.80
6"	209.47	217.43	231.02
8"	354.29	367.75	390.73
10"	510.10	529.48	562.57
12"	929.02	964.32	1,024.59

Alternative 1 Rate Structure Rate Forecast

	2012	2013	2014
	Existing Rates (no change)	Alternative 1 (no change)	6.25% Increase (across-the-board)
<i>Volumetric Rates</i>			
Inside - Dom			
Tier 1	\$ 1.51	\$ 1.63	\$ 1.73
Tier 2	\$ 1.96	\$ 2.12	\$ 2.25
Tier 3			
Inside - Com			
Tier 1	\$ 1.41	\$ 1.52	\$ 1.62
Tier 2	\$ 1.41	\$ 1.52	\$ 1.62
Tier 3			
Inside - Ind			
Tier 1	\$ 1.15	\$ 1.24	\$ 1.32
Tier 2	\$ 1.15	\$ 1.24	\$ 1.32
Tier 3			
Inside - Spr			
Tier 1	\$ 1.51	\$ 1.63	\$ 1.73
Tier 2	\$ 1.96	\$ 2.12	\$ 2.25
Tier 3			
Outside - Dom			
Tier 1	\$ 2.42	\$ 2.61	\$ 2.77
Tier 2	\$ 3.15	\$ 3.40	\$ 3.61
Tier 3			
Outside - Com			
Tier 1	\$ 2.26	\$ 2.44	\$ 2.59
Tier 2	\$ 2.26	\$ 2.44	\$ 2.59
Tier 3			
Outside - Ind			
Tier 1	\$ 1.84	\$ 1.99	\$ 2.11
Tier 2	\$ 1.84	\$ 1.99	\$ 2.11
Tier 3			
Outside - Spr			
Tier 1	\$ 2.42	\$ 2.61	\$ 2.77
Tier 2	\$ 3.15	\$ 3.40	\$ 3.61
Tier 3			

Alternative 2 Rate Structure Rate Forecast

	2012	2013	2014
<u>Monthly Charge</u>	Existing Rates (no change)	Alternative 2 (add 3rd tier)	6.25% Increase (across-the-board)
Inside City			
5/8"	\$ 5.35	\$ 5.55	\$ 5.90
3/4"	6.90	7.25	7.70
1"	9.81	10.67	11.34
1 1/2"	16.59	19.20	20.40
2"	26.90	29.43	31.27
3"	49.75	53.32	56.65
4"	80.92	87.44	92.91
6"	160.05	172.74	183.54
8"	270.71	275.10	292.29
10"	389.75	394.52	419.18
12"	709.83	735.71	781.69
Outside City			
5/8"	\$ 7.00	\$ 7.20	\$ 7.65
3/4"	9.03	9.44	10.03
1"	12.84	13.91	14.78
1 1/2"	21.70	25.08	26.65
2"	35.21	38.49	40.89
3"	65.11	69.77	74.13
4"	105.91	114.47	121.62
6"	209.47	226.20	240.34
8"	354.29	360.29	382.80
10"	510.10	516.71	549.01
12"	929.02	963.66	1,023.88

Alternative 2 Rate Structure Rate Forecast

	2012	2013	2014
	Existing Rates (no change)	Alternative 2 (add 3rd tier)	6.25% Increase (across-the-board)
<i><u>Volumetric Rates</u></i>			
<i>Inside - Dom</i>			
Tier 1	\$ 1.51	\$ 1.58	\$ 1.68
Tier 2	\$ 1.96	\$ 2.05	\$ 2.18
Tier 3		\$ 2.36	\$ 2.51
<i>Inside - Com</i>			
Tier 1	\$ 1.41	\$ 1.47	\$ 1.56
Tier 2	\$ 1.41	\$ 1.47	\$ 1.56
Tier 3		\$ 1.47	\$ 1.56
<i>Inside - Ind</i>			
Tier 1	\$ 1.15	\$ 1.20	\$ 1.28
Tier 2	\$ 1.15	\$ 1.20	\$ 1.28
Tier 3		\$ 1.20	\$ 1.28
<i>Inside - Spr</i>			
Tier 1	\$ 1.51	\$ 1.58	\$ 1.68
Tier 2	\$ 1.96	\$ 2.05	\$ 2.18
Tier 3		\$ 2.36	\$ 2.51
<i>Outside - Dom</i>			
Tier 1	\$ 2.42	\$ 2.52	\$ 2.68
Tier 2	\$ 3.15	\$ 3.28	\$ 3.49
Tier 3		\$ 3.78	\$ 4.02
<i>Outside - Com</i>			
Tier 1	\$ 2.26	\$ 2.35	\$ 2.50
Tier 2	\$ 2.26	\$ 2.35	\$ 2.50
Tier 3		\$ 2.35	\$ 2.50
<i>Outside - Ind</i>			
Tier 1	\$ 1.84	\$ 1.92	\$ 2.04
Tier 2	\$ 1.84	\$ 1.92	\$ 2.04
Tier 3		\$ 1.92	\$ 2.04
<i>Outside - Spr</i>			
Tier 1	\$ 2.42	\$ 2.52	\$ 2.68
Tier 2	\$ 3.15	\$ 3.28	\$ 3.49
Tier 3		\$ 3.78	\$ 4.02

Alternative 3 Rate Structure Rate Forecast

	2012	2013	2014
	Existing Rates (no change)	Alternative 3 (add 3rd tier)	6.25% Increase (across-the-board)
<i>Monthly Charge</i>			
Inside City			
5/8"	\$ 5.35	\$ 5.55	\$ 5.90
3/4"	6.90	7.25	7.70
1"	9.81	10.67	11.34
1 1/2"	16.59	19.20	20.40
2"	26.90	29.43	31.27
3"	49.75	53.32	56.65
4"	80.92	87.44	92.91
6"	160.05	172.74	183.54
8"	270.71	275.10	292.29
10"	389.75	394.52	419.18
12"	709.83	735.71	781.69
Outside City			
5/8"	\$ 7.00	\$ 7.20	\$ 7.65
3/4"	9.03	9.44	10.03
1"	12.84	13.91	14.78
1 1/2"	21.70	25.08	26.65
2"	35.21	38.49	40.89
3"	65.11	69.77	74.13
4"	105.91	114.47	121.62
6"	209.47	226.20	240.34
8"	354.29	360.29	382.80
10"	510.10	516.71	549.01
12"	929.02	963.66	1,023.88

Alternative 3 Rate Structure Rate Forecast

	2012	2013	2014
	Existing Rates (no change)	Alternative 3 (add 3rd tier)	6.25% Increase (across-the-board)
<i>Volumetric Rates</i>			
Inside - Dom			
Tier 1	\$ 1.51	\$ 1.59	\$ 1.69
Tier 2	\$ 1.96	\$ 1.91	\$ 2.03
Tier 3		\$ 2.23	\$ 2.37
Inside - Com			
Tier 1	\$ 1.41	\$ 1.48	\$ 1.57
Tier 2	\$ 1.41	\$ 1.48	\$ 1.57
Tier 3		\$ 1.48	\$ 1.57
Inside - Ind			
Tier 1	\$ 1.15	\$ 1.21	\$ 1.29
Tier 2	\$ 1.15	\$ 1.21	\$ 1.29
Tier 3		\$ 1.21	\$ 1.29
Inside - Spr			
Tier 1	\$ 1.51	\$ 1.59	\$ 1.69
Tier 2	\$ 1.96	\$ 1.91	\$ 2.03
Tier 3		\$ 2.23	\$ 2.37
Outside - Dom			
Tier 1	\$ 2.42	\$ 2.55	\$ 2.71
Tier 2	\$ 3.15	\$ 3.06	\$ 3.25
Tier 3		\$ 3.56	\$ 3.78
Outside - Com			
Tier 1	\$ 2.26	\$ 2.38	\$ 2.53
Tier 2	\$ 2.26	\$ 2.38	\$ 2.53
Tier 3		\$ 2.38	\$ 2.53
Outside - Ind			
Tier 1	\$ 1.84	\$ 1.94	\$ 2.06
Tier 2	\$ 1.84	\$ 1.94	\$ 2.06
Tier 3		\$ 1.94	\$ 2.06
Outside - Spr			
Tier 1	\$ 2.42	\$ 2.55	\$ 2.71
Tier 2	\$ 3.15	\$ 3.06	\$ 3.25
Tier 3		\$ 3.56	\$ 3.78