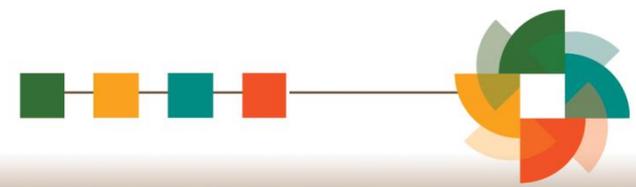


An Integrated Water and Sewer Utility Planning and Rate Study for



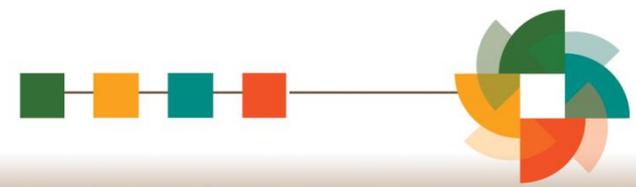
October 4 & 5, 2011





Scope of Study





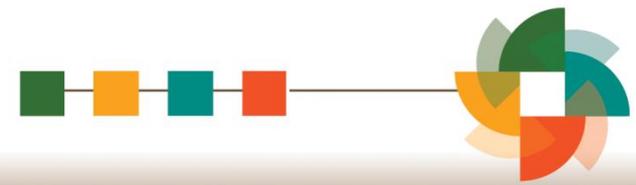
Part 1: Capital Assets

- Inventory water & sewer system
 - Plants, mains, and parts
- Identify needed improvements
- Quantify replacement costs
- A Community Investment Plan



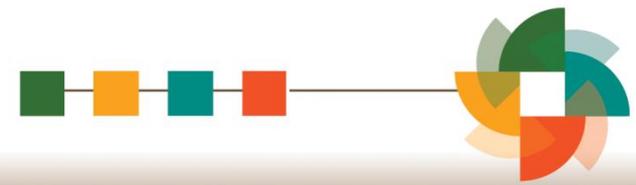
Part 2: Financial Factors

- Evaluate utility financial status
 - Operations, Debt, Capital Outlay
- Analyze cash flow and reserves
- Estimate usage (growth or loss)
- Recommend utility rate adjustments
- Compare Carbondale rates to others

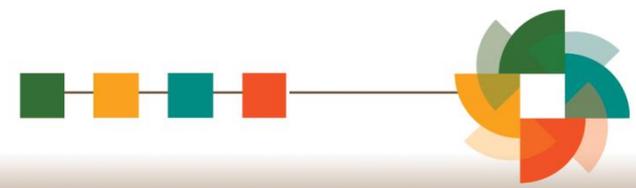


Key Findings





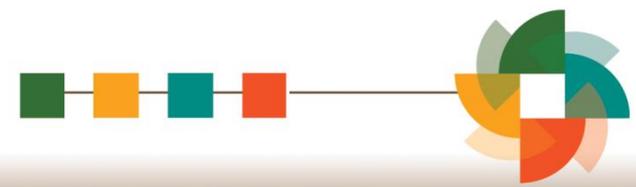
Capital Assets



Water & Sewer System Assets

- Well maintained
- Need to replace due to wear & tear; aging components
- Need to replace underground tanks at risk of flood damage
- Need to loop water lines
- Need to enlarge some mains

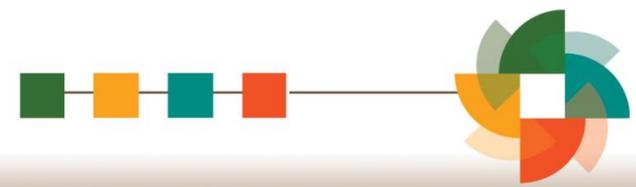
Key Findings



Number of Water Main Breaks per Fiscal Year

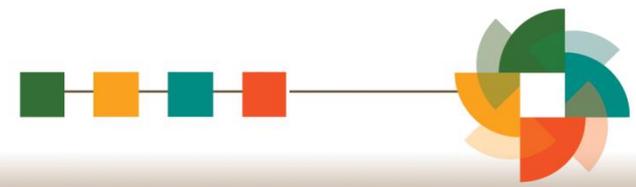
2007	63
2008	91
2009	54
2010	67

Key Findings



Number of Sewer Line Stoppages per Fiscal Year

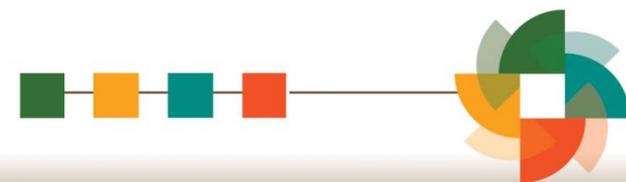
2007	109
2008	169
2009	128
2010	128



Needed Capital Reinvestment

- Replace water mains
- Line sewer pipes
- Repairs to sewage treatment plants
- Replace pumps, seal covers, and other system components

Key Findings

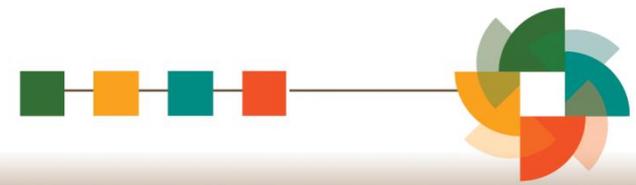


Water Rates

FY2011 Description	Monthly/1,000 gallons*
Residential and Commercial	\$3.35
Southern Illinois University (large meters)	\$3.03
South Highway Water District (large meters)	\$3.18
Lakeside Water District	\$3.31
Former Crab Orchard District	\$5.42

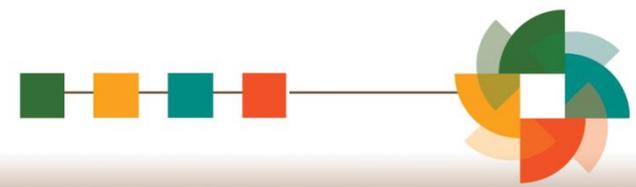
*** City also charges a minimum monthly fee of \$10.05 for initial 3,000 gallons.**

Key Findings



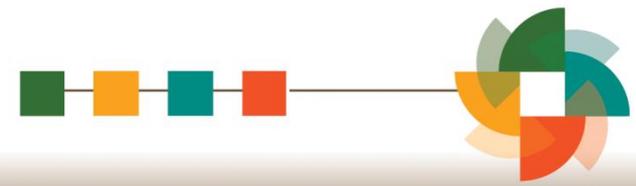
Sewer Rates

FY2011 Description	Monthly/1,000 gallons*
All Customers	\$3.56



Financial Analysis

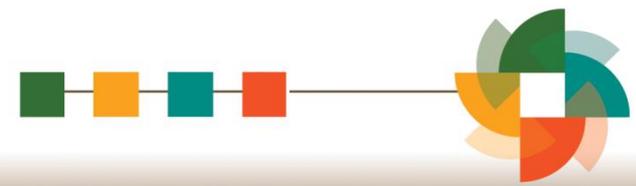
**Good News
&
Bad News**



Good News

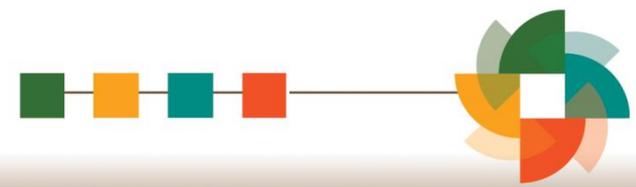
- Income now sufficient for current operations & debt payments.
- Net working capital reserve & cash balance regularly exceeds target.*

* Target is 6 months of operating expenses plus 100% of debt service for following year.



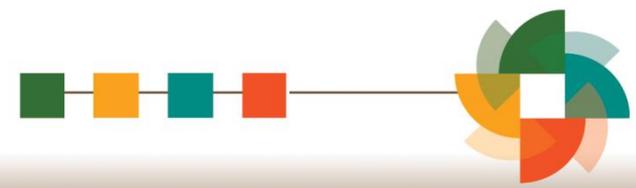
Bad News

- Depreciation of capital assets continues to grow.
- Cost of deferred projects to grow.
- Income not sufficient to pay for Capital asset replacements.



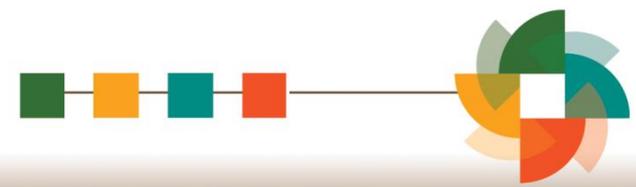
Recommendations





5-Year Community Investment Plan

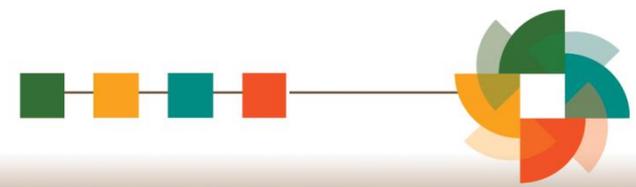
Recommendations



Existing Community Investment Plan

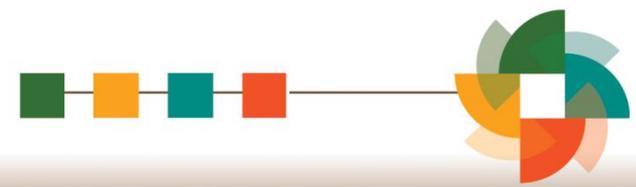
	Water	Sewer	Combined
FY 2012	\$721K	\$579K	\$1.300M
FY 2013	\$688K	\$340K	\$1.028M
FY 2014	\$780K	\$520K	\$1.300M
FY 2015	\$1.30M	\$115K	\$1.415M
FY 2016	<u>\$676K</u>	<u>\$824K</u>	<u>\$1.500M</u>
	\$4.165M	\$2.378M	\$6.543M

Recommendations



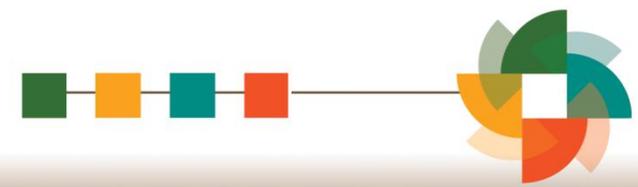
Increased Community Investment Plan

	Existing	Additional	Total
FY 2012	\$1.300M	\$0.000M	\$1.300M
FY 2013	\$1.028M	\$1.233M	\$2.261M
FY 2014	\$1.300M	\$1.972M	\$3.272M
FY 2015	\$1.415M	\$2.788M	\$4.203M
FY 2016	<u>\$1.500M</u>	<u>\$3.688M</u>	<u>\$5.188M</u>
	\$6.543M	\$9.681M	\$16.224M



Utility Rates

Recommendations



Proposed Monthly Water & Sewer Rates Residential Customers

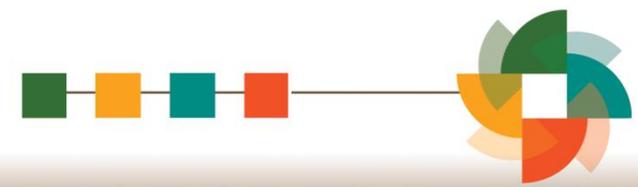
Rates per thousand Gallons

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Water	3.52	3.69	3.87	4.06	4.25
Sewer	3.74	4.21	4.74	5.33	6.00

Fixed Customer Charge

Water	-	3.24	3.40	3.56	3.73
Sewer	-	3.53	3.97	4.47	5.03
Total		6.77	7.37	8.03	8.76

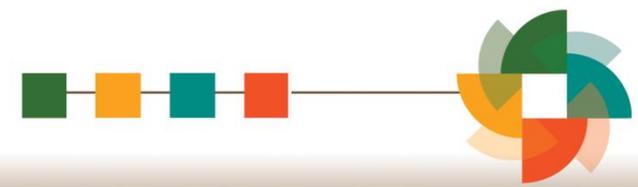
Recommendations



Proposed Water & Sewer Rates – Typical Residential Billing

Low Usage:		1,000 Gallons 20th Percentile			
Cost	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Water	10.56	6.93	7.27	7.62	7.98
Sewer	11.22	7.74	8.71	9.80	11.03
	21.78	14.67	15.98	17.42	19.01
	\$ Change	(7.11)	1.31	1.44	1.59
	% Change	-33%	9%	9%	9%

Recommendations

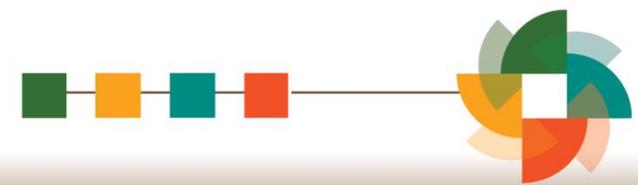


Proposed Water & Sewer Rates – Typical Residential Billing

Moderate Usage: 2,600 Gallons Median

Cost	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Water	10.56	12.83	13.46	14.12	14.78
Sewer	11.22	14.48	16.29	18.33	20.63
	21.78	27.31	29.75	32.45	35.41
\$ Change		5.53	2.44	2.70	2.96
% Change		25%	9%	9%	9%

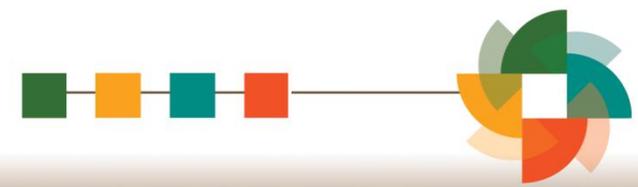
Recommendations



Proposed Water & Sewer Rates – Typical Residential Billing

High Usage:		4,200	Gallons	80th Percentile		
Cost	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	
Water	14.78	18.74	19.65	20.61	21.58	
Sewer	15.71	21.21	23.88	26.86	30.23	
	30.49	39.95	43.53	47.47	51.81	
	\$ Change	9.46	3.58	3.94	4.34	
	% Change	31%	9%	9%	9%	

Recommendations



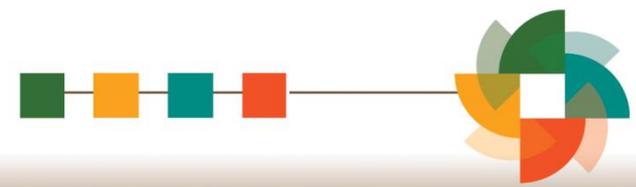
Proposed Monthly Water & Sewer Rates Major Customers

Rates per thousand Gallons

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Water	3.52	3.69	3.87	4.06	4.25
Sewer	3.74	4.21	4.74	5.33	6.00

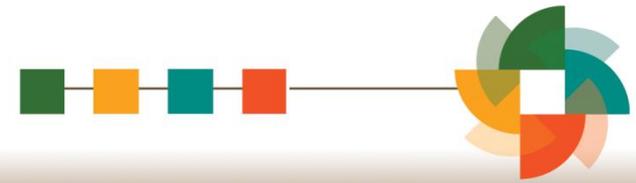
Fixed Customer Charge

Water	-	3.24	3.40	3.56	3.73
Water Bulk		324.00	340.00	356.00	373.00
Sewer	-	3.53	3.97	4.47	5.03
Total		330.77	347.37	364.03	381.76



Carbondale Compared to Others

Survey



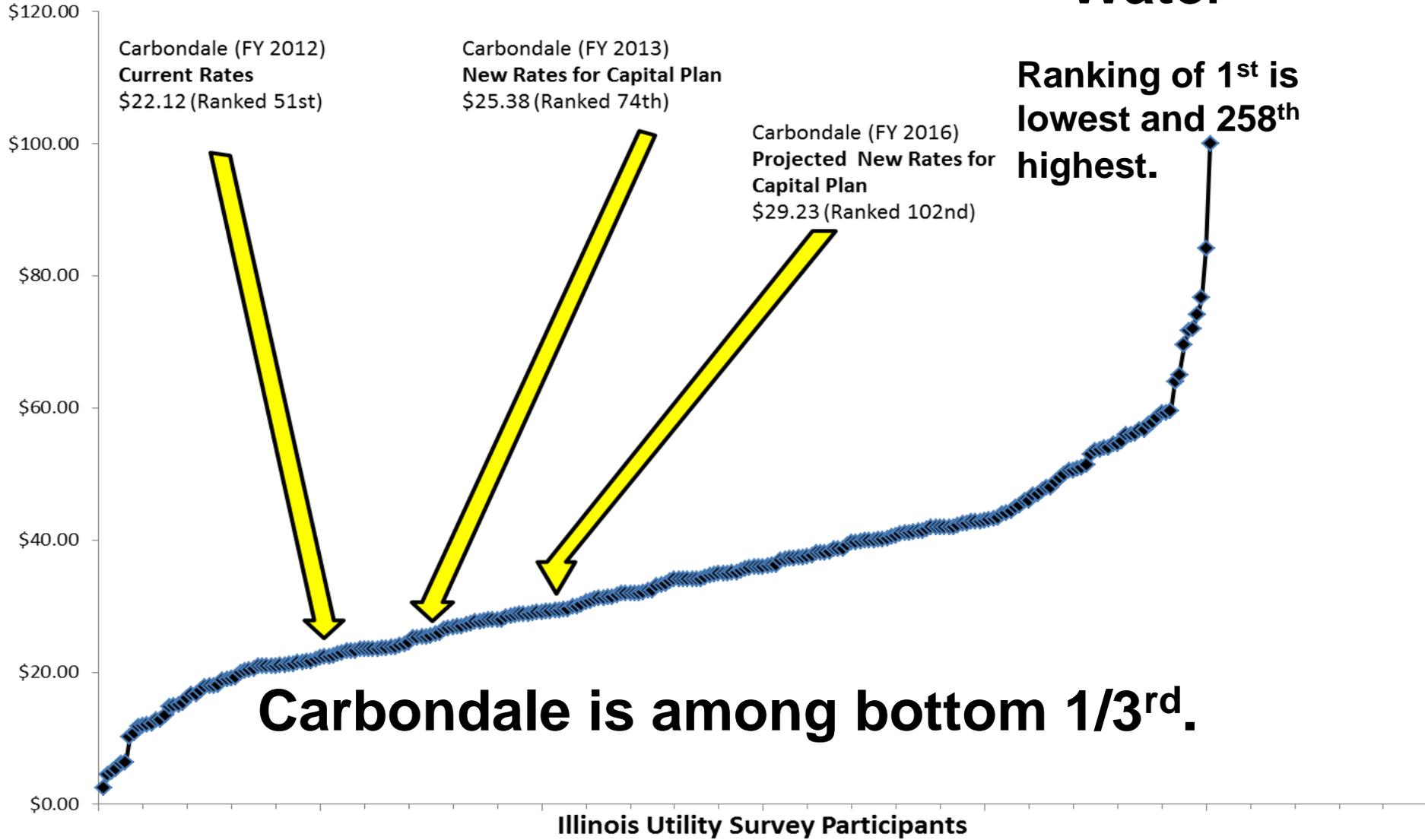
Participants:

- ❖ **258 Municipalities - Water Service**
- ❖ **197 Municipalities - Sanitary Sewer Service**

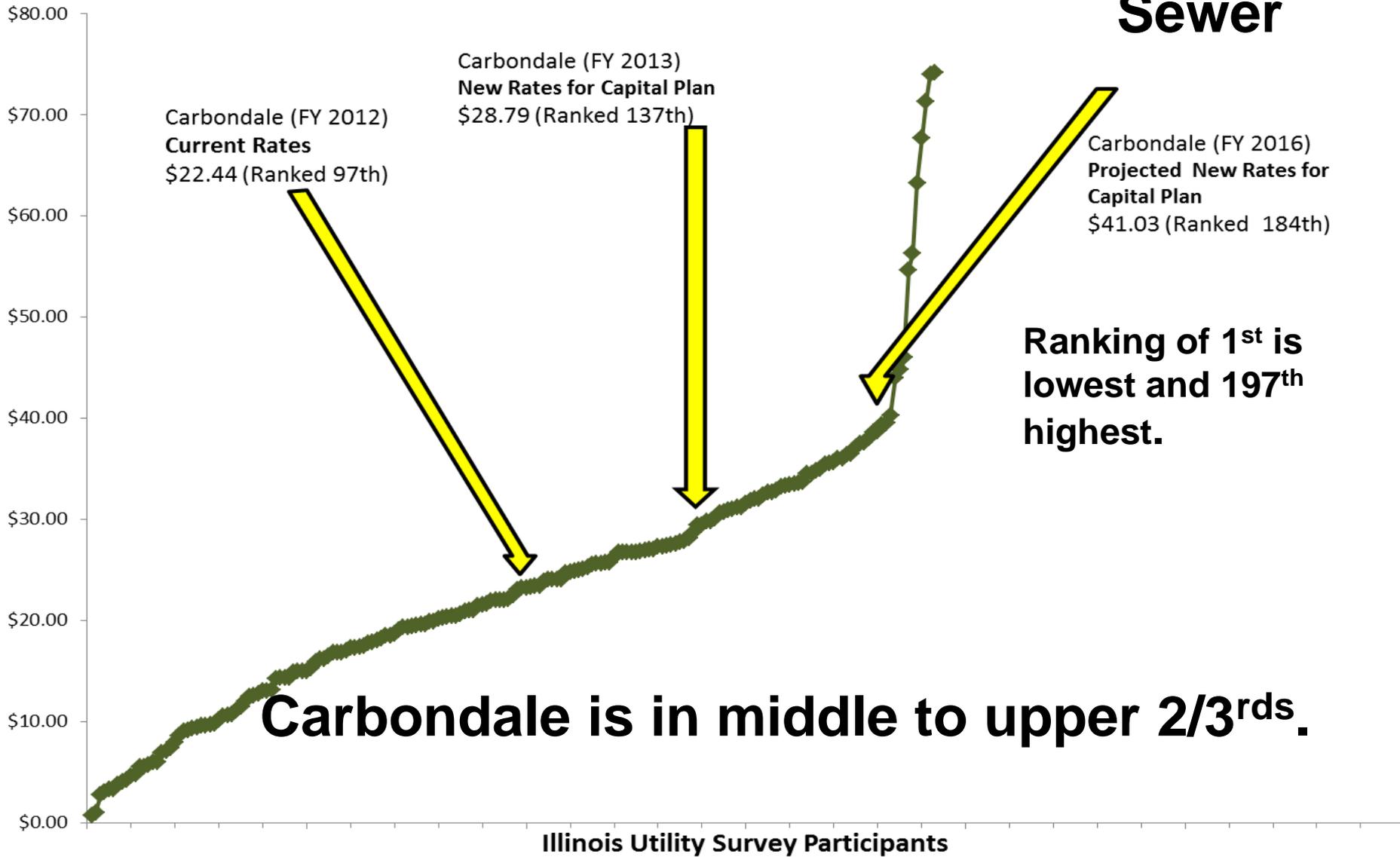
Apple to Apple Comparison:

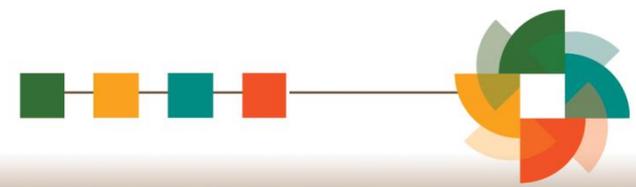
- **Based upon 6,000 gallons used.**
- **Rankings on following slides assume no change in other municipal utility rates.**

Water

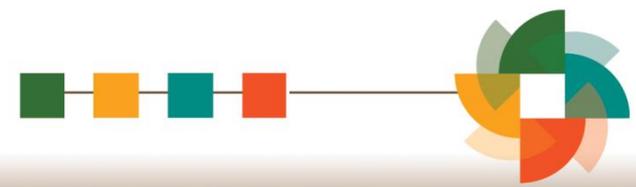


Sewer





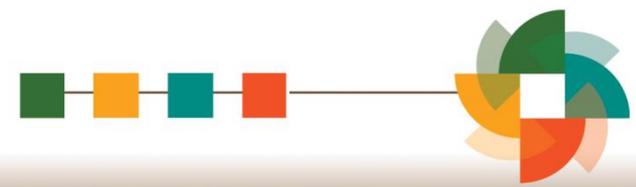
Funding Plan 5-Year Capital Investment Plan



Funding Plan 5-Year CIP

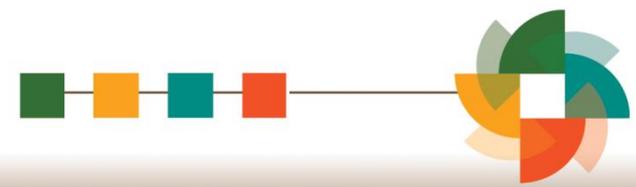
Budget for needed capital investment starts at \$1.30M in FY 2012.

An average of \$3.73M would continue to be invested over next 4 years.



Funding Plan 5-Year CIP

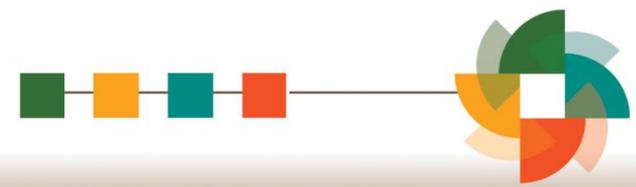
Budget additional revenue derived from rate adjustments to pay for capital investments.



Funding Plan 5-Year CIP

Maintain minimum cash balance equal to 6 months of operational costs plus 100% of next year's debt service.

Carefully monitor the results!



An Integrated Water and Sewer Utility Planning and Rate Study for



October 4 & 5, 2011



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